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Resilience and Resistance: How First Generation College Students Leverage Community Cultural Wealth and Social Capital to Successfully Transfer from a Community College to a Selective Four-year Institution

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RESILIENCE AND RESISTANCE: HOW FIRST GENERATION COLLEGE STUDENTS LEVERAGE COMMUNITY CULTURAL WEALTH AND SOCIAL CAPITAL TO SUCCESSFULLY TRANSFER FROM A COMMUNITY COLLEGE TO A SELECTIVE FOUR-YEAR INSTITUTION

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Dissertation Abstract

Resilience and Resistance: How First Generation College Students Leverage Community Cultural Wealth and Social Capital to Successfully Transfer from a Community College to a Selective Four-year Institution

The purpose of this study was to gain a better understanding of how first generation college students leverage both traditional forms of social capital and community cultural wealth in the process of transferring from a California community college to a selective four-year institution, using a Critical Race Theory (CRT) paradigm, and a framework including Stanton-Salazar's (1997) network analytic theory and Yosso's (2005) community cultural wealth. The current study adds to the literature by critically analyzing the post-secondary education experiences of first generation community college transfer students, focusing on the students' strengths and gaining a better understanding of what institutional and community based resources they drew on to successfully navigate the transfer pathway.

This mixed methods study was situated at UC Berkeley and included 115 survey respondents and 15 individual interviews. All participants were first generation college students who had transferred to UC Berkeley from a California community college. Qualitative analysis was intentionally centered in this study in order to address elements of community cultural wealth that previous survey instruments have not adequately captured. Survey results are presented through descriptive analysis, drawing on a critical quantitative survey design. Findings show that students leveraged a variety of resources including institutionally based support through faculty, counselors and specialized support programs, and community based supports such as family, peers and students' own online research to navigate the transfer pathway.

This dissertation, written under the direction of the candidate's dissertation committee and approved by the members of the committee, has been presented to and accepted by the Faculty of the School of Education in partial fulfillment of the requirements for the degree of Doctor of Education. The content and research methodologies presented in this work represent the work of the candidate alone.

Christina Teller	May 12, 2016
Candidate	Date

Dissertation Committee

Dr. Uma Jayakumar	May 12, 2016
Chairperson	
Dr. Patricia Mitchell	May 12, 2016
Dr. Patrick Camangian	May 12, 2016

DEDICATION

I dedicate this dissertation to the first generation students at UC Berkeley who contributed to this study. I am humbled by your strength, resilience and perseverance. I am grateful for your trust in sharing your stories with me.

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CHAPTER I

STATEMENT OF THE PROBLEM

Enrollment in higher education continues to rise, and the student body eligible for post-secondary education is increasingly diverse (NCES, 2013). A closer look at the educational outcomes and degree completion rates, however, reveals a troubling reality of social stratification. Low-income high school graduates are less likely to enroll in post-secondary education despite high aspirations, and those who do enroll in college are less likely than their higher-income peers to earn a post-secondary degree (Engle & Tinto, 2008). The difference in educational outcomes between low-income and high-income students is staggering—with half of students from higher-income backgrounds earning a bachelor's degree by age 25, compared to 10% of people from low-income families (Bailey & Dynarski, 2011), and the majority of low-income students are first generation college students (Chen, 2005; Ishitani 2003). Woven within this reality are issues of equity, access to education and race because low-income and first generation college students are more likely to be Black or Latino/a and come from families where neither parent holds a college degree (Chen, 2005; Ishitani 2003). For students of color, first generation students and students from low-income backgrounds, a bachelor's degree is an increasingly important lever for access to social mobility and economic stability. For this student population, transferring from a community college to a four-year institution is a critical mechanism in the quest for a bachelor's degree, as first generation, students of color, and low-income students are more likely to begin post-secondary education in a community college (Engle & Tinto, 2008).

There are a range of structural and institutional barriers working against student transfer which often result in a "cooling out" of aspiration or motivation for students, including those who possess an understanding of transfer requirements and what transfer entails. These structural barriers that function as a tracking system work against students transferring from community college to a four-year institution and include inconsistent admissions requirements between universities within the same system, difficulty enrolling in required transfer courses, insufficient institutional support for transfer readiness, and inadequate availability of academic counseling (Suarez, 2003). Critical scholars assert that the schooling system was structured to create inequitable results or to track certain students toward certain directions. As stated by Stanton-Salazar (1997):

> these structural problems are not unfortunate quirks in the system that have yet to be fully resolved; rather, they are mechanisms intrinsic to the inner workings of mainstream institutions that function both to problematize the social development of working-class minority youth and to engineer their failure in school. (p. 8)

It is within this environment that policy makers and workforce experts have called for an increase in post-secondary attainment across demographics within the U.S.

College completion is at the forefront of legislative, higher education, and workforce development agendas as economic reports have highlighted the fact that the United States is lagging behind other nations in college completion rates (Carnevale, Smith & Strohl, 2010). Data from the Organisation for Economic Co-operation and Development (OECD, 2013) points out that the U.S. now ranks 12th worldwide in four-year degree attainment among 24-34 year olds after previously ranking first in 1990 (White House Report, 2014). With presidential directives issued by The White House in recent years, including a call to action for institutions of higher education to educate more low-income students and increasing tuition support for community college students, the

Obama administration has emphasized the benefits of post-secondary education from an individual, economic and civic engagement standpoint. In response to this, post-secondary officials across the United States have pledged to invest in a variety of strategies to recruit more low-income students and better support them once they enroll in college. Perhaps the best demonstration of the need for this type of support is the millions of students who begin post-secondary education in a community college with the intent to transfer but who leave without completing a degree or certificate and without transferring to a four-year school. In order to meet workforce demands for more post-secondary education and to improve income equality, an additional 20 million individuals will need post-secondary education by 2025, including 15 million with a bachelor's degree (Carnevale and Rose, 2011). A well-functioning and efficient transfer function between community colleges and four-year institutions is a critical piece of this post-secondary education achievement equation (Handel, 2013; Moore et al., 2009).

What is often left out of the post-secondary completion agenda rhetoric is a recognition of the complexities and historically-rooted systematic inequalities that traditionally under-represented students must navigate and overcome in order to persist and complete post-secondary education, including graduating from under-funded K-12 schools that lack sufficient resources and infrastructure to adequately prepare students for college (Gándara, 2002; Oakes, Rogers, Lipton & Morrell, 2002), the tracking system that exists within the K-12 educational system (Oakes, 1985), and systematic barriers within the post-secondary education system. These barriers exist particularly within community colleges, where tracking away from transfer and toward vocational programming, and systematic inefficiencies—including a moving target of what "transfer

ready" means and complex articulation agreements—inhibit the trajectory of students (Brint & Karabel, 1989; Dougherty, 1994; Moore, Shulock, & Jensen, 2009). The barriers at the community college level are obstacles that students who start directly in a four-year institution never have to face.

Numerous factors contribute to this inequitable reality where low-income, first generation and students of color are less likely to receive the necessary guidance and information as well as the academic preparation in order to be eligible to enroll in post-secondary education immediately following high school graduation (McDonough, 1997; Oakes & Lipton, 1996). From a workforce and competitive economic standpoint, it may be in the nation's best interest for more traditionally under-represented students to earn additional post-secondary education, but more importantly, this is a moral and ethical imperative, as post-secondary education has been shown to be one of the most effective forms of social mobility (White House Report, 2014). While students with a community college degree earn 29% more than students with only high school diplomas, individuals with a bachelor's degree earn 40% more in their lifetime than someone with only a high school diploma (Department of Education, 2011). The importance of the transfer function is especially critical for students of color and other traditionally underrepresented students in higher education who are more likely to begin their post-secondary educational journey in a community college (California Tomorrow, 2002; Rendón, 1993). The majority of students entering community college with transfer aspirations do not transfer (U.S. Department of Education, 2005), and the few community college who do transfer rarely move on to selective institutions (Dowd & Melguizo, 2008). The over-representation of students of color in the community college system and

their under-representation in selective four-year universities has contributed to the persistence of the educational gap and earnings gap for graduates from institutions of differing prestige (Bensimon & Dowd, 2009; Zhang, 2008).

The increased attention on post-secondary completion in recent years has both implicitly and explicitly highlighted the importance of the community college system (Handel, 2013). According to National Student Clearinghouse data (Shapiro, Dundar, Chen, Ziskin, Park, Torres, & Yi-Chen, 2012) regarding students completing a bachelor's degree in 2011-12, 45% had at some point enrolled in a community college, and in five of the seven states that produce over 100,000 bachelor's degrees (including California), 50% or more of these students started their post-secondary journey in a community college. The community college system plays a critical role in terms of occupational opportunity and educational attainment in post-secondary education, particularly for first generation college students and students of color, as the community college system is often the gateway to post-secondary education for traditionally under-represented students in higher education (California Tomorrow, 2002). Research has shown that community college is often a second chance at opportunities available through post-secondary education for students who have graduated from under-funded and under-resourced high schools, and for whom a four-year university was not an option after high school graduation (Dowd, Pak & Bensimon, 2013). Despite high enrollment in California community colleges, very few students successfully transfer. In a state where the majority of students begin post-secondary education in a community college, California's inefficient transfer system creates a daunting barrier for students with high aspirations (Moore et al., 2009).

Community colleges serve a student body who enroll in institutions for a number of reasons, and serve a larger percentage of low-income, students of color, non-traditional students, and students from low-income backgrounds than four-year institutions (Goldrick-Rab, 2010; Provasnik & Plenty, 2008). There are contradictory and competing interpretations of the function and impact that community college education can have on the trajectory of a student's post-secondary journey. Rosenbaum, Deli-Amen & Person (2006) found that students who entered higher education through a community college often increase their aspirations after beginning college. Others have criticized the community college system for its "cooling out" function (Clark, 1960). The "cooling out" function suggests that students often come into the community college intending to transfer but instead complete a terminal vocational degree or associate's degree after losing momentum and motivation due to factors including the remedial coursework requirements, lack of course availability, or tracking toward vocational pathways for lower-socio-economic or first generation students (Villalpando, 2004). In fact, Driscoll (2007) found that by the second semester, a majority of community college students with transfer aspirations and bachelor's degree aspirations have left college or lowered their educational goals. Completing remedial coursework is costly for students, both in terms of time and money, and many students may lose motivation, or run out of time and money before beginning transfer-approved coursework (Gándara, Alvarado, Driscoll, & Orfield, 2012).

This is particularly damaging for students of color, who are more likely to be first generation college students. Research has shown that without clear and targeted academic support, this student population is less likely to persist and transfer to a four-

year university, thus eliminating their chance at a bachelor's degree, which is one of the most critical levers to social mobility for low-income and students of color (Rendón, 1993). The reality is that low-income and students of color too often are caught in a seemingly never-ending cycle of remedial coursework, face challenges accessing transfer-eligible courses in over-crowded and under-funded institutions or are tracked toward vocational pathways (Brint & Karabel, 1989; Clark, 1960; Dougherty, 1994; Jain, 2009). This troubling reality is in stark contrast to what many hold as the purpose of community colleges, which are often referred to as democratizing institutions that even the playing field (Cohen & Brawer, 2003). Attending community college can either propel or impede a student's progress toward post-secondary degree attainment depending on the actions, cultural practices of staff and administrators and policies within a college (Dowd, Pak & Bensimon, 2013). Even with policies in place that promote transfer with the intent of equalizing the playing field, however, this is not always reality.

As with other sectors of the post-secondary education system, there has been an increased focus on completion in the community college system, as the measure of success in post-secondary education shifts from access to completion (Bragg & Durham, 2012). Many students entering the community college system do so with the intent to transfer. Depending on the study, anywhere from 50% to 80% of first-time community college students intend to transfer (Horn, 2009; Horn & Skomsvold, 2011; Provasnik & Planty, 2008), but far fewer students actually transfer. For first-time freshman enrolling in a community college who reported the intention to transfer to a four-year school, more than a third had left school without completing a degree or certificate program (Provasnik & Plenty, 2008).

A significant challenge faced by students who wish to transfer from a community college to a four-year institution is the differing transfer requirements between four-year institutions, as well as differences in entrance requirements between colleges and majors within the same institution (Handel, 2013**;** Karandjeff & Schorring, 2011). Even with articulation agreements in place, the transfer rate remains low, pointing to the increased importance of institutional agents including counselors, faculty and administrators to help students navigate the transfer pathway—a pathway which is "marked by 'structural holes,' such as poor curriculum alignment, notably different student financing systems, and near-total separation of faculty members in the two settings" (Dowd, Pak & Bensimon, 2013, p. 7). The transfer function is a gateway for traditionally under-represented students, low-income students, and students of color. In order to truly serve as a democratic institution, community colleges should provide students—who often could not directly access a four-year institution after high school due to graduating from an under-resourced K-12 systems—with access to high status career paths and advantages associated with a bachelor's degree (Dowd et al., 2013).

Transferring to a four-year institution may become even more challenging as the demand on the community college systems increases. Nationally, community colleges enroll nearly half of all undergraduate students, with more than seven million students enrolled in credit-bearing courses (American Association of Community Colleges [AACC], 2012). According to the U.S. Department of Education statistics, by 2020 there will be a 13% increase in students enrolling in post-secondary education despite a predicted decrease in the number of students graduating from high school (Hussar & Bailey, 2011). The expected increase in students seeking post-secondary education is

expected to come from part-time students and the increase in the number of Latino/a students eligible for post-secondary education, both populations that are more likely to matriculate in the community college system (Handel, 2013; Hussar & Bailey, 2011). Data from The College Board shows a nearly 50% increase in the number of students enrolling full-time in a community college over the past decade, and some scholars have interpreted this shift as an indication that students who might have otherwise matriculated at a four-year institution opted instead for a lower cost community college (Baum, Ma & Payea, 2012; Dadashova et al., 2011).

The number of students choosing to enroll in a community college over a four-year institution due to factors such as rising tuition costs and an increasingly competitive admissions process for four-year institutions is expected to increase (Goldrick-Rab, Harris, Mazzeo, & Kienzl, 2009). A further increase in enrollment demands on an already over-extended community college system is likely to negatively impact first generation students and students of color whose primary point of access to post-secondary education is a community college. And while Handel (2013) referred to community colleges as an "expressway to the bachelor's degree," (p. 12), statistics show that this is only true for some students, with students from more advantaged backgrounds who start in a public, two-year institution achieving a bachelor's degree at a rate five times higher than low-income, first generation students (Engle & Tinto, 2008). Looking at educational attainment through a social capital lens, the expressway is only available to students who have access to the information and network needed to support a student's journey through the often complex and convoluted transfer pathway to a four-year institution (Stanton-Salazar, 1997). The competing explanations and lack of consensus

around how students make sense of their community college experiences, especially as related to transfer, point to the need for a better understanding of the factors that support the successful transfer and negotiation of institutional barriers by first generation students who matriculate at a four-year institution.

To understand the experience of navigating the transfer process from a community college to a four-year institution, the persistence, retention and transfer literature must be considered with specific attention paid to low-income, minority and first generation college students who begin post-secondary education in a community college. It is well understood in the persistence and retention literature that the majority of first generation students entering a community college do not transfer and that a large percentage leave without completing a degree or certificate. There is much less focus on successful first generation college students. Most of the scholarly work on first generation college students is quantitative or narrowly focuses on high-achieving low-income students. Similarly, the majority of extant persistence, retention and transfer studies are quantitative and draw on large national data sets. While quantitative data is informative for documenting patterns and testing relationships that can be generalized, it does not capture the voices of students and a nuanced account of their lived experience. Additionally, the most widely used frameworks to understand student retention and persistence—Tinto's Interactionalist Theory (1993) and Astin's Theory of Involvement (1984)—are rooted in the experience of traditional four-year college students (Braxton & Lien, 2000; Nakajima, Dembo & Mosler, 2012; Rendón, Jalomo, & Nora, 2000), and these theories are not helpful for understanding the role of structural barriers and

navigation that occurs for students who begin their post-secondary education in a community college.

A growing body of work within the persistence literature challenges the assumptions put forth by Tinto (1993) and Astin (1984) and offers alternative frameworks for understanding the often complex post-secondary educational experience of traditionally under-represented students (Hurtado & Carter, 1997; Nora, 2004; Rendón, 1993). Research has shown that low teacher expectations, micro-aggressions, hostile campus climate and differential access to information and support from staff and administrators within the educational setting have a profoundly negative impact on the persistence and retention of first generation college students and ultimately their eligibility to transfer to a four-year institution (Jain, 2009; Solórzano, 1997; Solórzano, Ceja, & Yosso, 2000). Crisp and Nunez (2014) found that the campus climate and environment plays more significant role in the likelihood of transfer for traditionally under-represented minority students as compared to White students. Furthermore college environment and experiences, not precollege factors, have a more significant impact on first generation and minority students' outcomes than for continuing-generation students or White students (Crisp & Nunez, 2014). Given this understanding, there needs to be more research highlighting the resilience and resistance first generation college students demonstrate in their navigation to and through the post-secondary education system. Instead, what is most often focused on is the low attainment rates and the litany of challenges that this population of students face throughout their post-secondary educational journey. In many ways, first generation students and students of color are "othered" in the post-secondary setting because they are often the first in their family to

attend college (Ladson-Billings, 1989). The educational system was designed to meet the needs of White, middle class students and has been slow to adapt to holistically serve a broader demographic (Ladson-Billing, 1998). Without recognizing this reality of "othering" or "otherness" and simply reporting statistics of success or failure, the deficit framework is perpetuated (Solórzano & Yosso, 2002). While a number of studies have investigated the role of traditional forms of social capital in the educational outcomes of first generation students of color (see Ceja, 2006; Gonzalez, Stoner, & Jovel, 2003; McDonough, 1997; Perna, 2000), there has been relatively little inquiry focusing on social capital in the community college transfer process (Bensimon, & Dowd, 2009; Dowd, Pak & Bensimon, 2013), and few studies have utilized Yosso's (2005) framework of community cultural wealth to understand the community college to four-year transfer process for traditionally under-represented students (Martin, 2014). Without an acknowledgement and understanding of the strengths and resilience that first generation students and students of color leverage to overcome the institutional and structural barriers layered throughout the transfer process, the narrative that exists in the literature is one that is deficit focused and emphasizes the "failure" of this population to transfer to a four-year institution. It is important to expand the discourse to acknowledge that students of color, low-income, and first generation students are more likely to face challenges based on K-12 schooling practices and access to resources, and that this population encounters an additional set of challenges at the community college that students entering a four-year institution directly do not have to navigate. Therefore the purpose of this study was to gain a better understanding of how first generation college students leverage both traditional forms of social capital and community cultural wealth in the process of

transferring from a community college to a selective four-year institution. Using a Critical Race Theory (CRT) paradigm, the current study sought to add to the literature by providing a critical analysis of the post-secondary education experiences of first generation community college transfer students, focusing on the students' strengths and gaining a better understanding of what institutional and community based resources first generation community college transfer students draw on to successfully navigate the transfer pathway.

Purpose of the Study

This mixed methods study examined the experience of first generation community college students, with a particular focus on students of color, who transferred to a selective four-year institution from a California community college. The California Community College system is the largest post-secondary education system in the U.S. and serves more students of color in California than the CSU and UC systems combined (California Postsecondary Education Commission [CPEC], 2008). With an increase in students accessing community colleges projected to continue in California, a high demand for quality education will be continued to be placed on an already stretched and under-funded community college system (California Tomorrow, 2002). In a time when higher education leaders are grappling with how to better support and retain first generation, low-income students, the results of this study provide insight into what factors contribute to successful navigation of the community college to four-year institution pathway. This study contributes to policy and practice in the area of post-secondary education by providing insight into the lived experience of a population of

students who have received relatively little attention in the scholarly literature while decisions continue to be made on their behalf.

Increasing post-secondary degree completion is a national priority, and understanding what factors encourage or impede the transfer pathway for first generation community college students, with a particular focus on students of color, is a critical piece of this puzzle. However, little scholarly inquiry focuses on the lived experience of first generation community college students, and even less utilizes Yosso's (2005) community cultural wealth framework in addition to the traditional social capital understanding based on Bourdieu (1977) and Coleman (1988). What is missing from the current dialogue in the research literature is a contextual understanding of the assets and strengths that first generation college students bring with them into the educational space, and the tools and resources they draw upon to navigate the educational system that was originally designed and structured to serve and support the needs of White middle class students (Delgado & Stefancic, 2012; Ladson-Billings, 1989). From a social capital standpoint, the educational system acts as a social sorting system, keeping certain groups of people on track for higher educational attainment with systematic barriers erected to keep other parts of the population on a lower track, thus maintaining existing social order (Jayakumar, Vue & Allen, 2013). When students of color struggle or do not reach their potential in a meritocracy that was set up to reward students from well-resourced communities, negative stereotypes of people of color are perpetuated, and the student or the student's home community is often blamed (Solórzano & Yosso, 2002). National statistics tell a story of obstacles and limited progress. By digging deeper and giving voice to the students that make up the statistics through the use of counter-story telling,

we can work toward challenging the dominant narratives that aim to undermine the strengths and resources that students draw upon to resist oppressive schooling structures (Solórzano & Yosso, 2002). With a better understanding of these, we as educators can better serve students and help develop and draw upon these sources of strength. Counter-storytelling utilized in CRT challenges the mainstream legal approach of assuming "universalism" instead of recognizing the "particularity" of different individuals (Ladson-Billings, 1998, p. 13). In an educational context, when students who are traditionally under-represented, low-income, or students of color are not performing at the same level as their White or non-first generation peers, the student is often blamed for the deficiency (Ladson-Billings, 1998; Stanton-Salazar, 1997). Without a contextual understanding of the variety of factors that are involved and contribute to academic engagement and the measurement of a student's individual achievement, educators risk perpetuating the cycle of universalism.

Background and Need

Jobs are increasingly requiring postsecondary education, with the number of those requiring more than a high school degree doubling over the last 40 years (Carnevale et al., 2010). The difference in lifetime earnings between a high school dropout and a college graduate is more than $1 million (Carnevale, Rose, & Cheah, 2011). Currently low-income, first generation college students make up only a quarter of the post-secondary enrollment nationwide (Engle & Tinto, 2008), however this number is expected to continue to grow in coming years (NCES, 2013). Research has shown that first generation college students fare worse in higher education than their more advantaged peers, with low-income first generation college students four times as likely to leave post-

secondary education at the end of their first year regardless of institution type (Engle & Tinto, 2008). Critical race scholarship holds that systematic forces, including the history of exclusion and official limitation of educational opportunities for people of color, have created persistent unequal outcomes that continue today (Patton, Harper & Harris, 2015). The educational system and broader societal structures were set up to support the success of some (namely White students) and limit or inhibit the success of others (students of color). Recent statistics on educational attainment show that these institutional forces are continuing to have their intended impact (Patton et al., 2015). For the community college system in particular, one of the original functions was to restrict the number of students who transfer to a four-year institution (Brint & Karabel, 1989; Clark, 1960). In fact, the role of the community college was initially designed by elite university administrators to serve as a "shock absorber" to limit the number of students who ended up at four-year institutions by diverting students toward vocational programs and away from transfer pathways (Brint & Karabel, 1989).

This outcome is particularly troubling in the public community college and for-profit educational settings, which are a more common entry point for first generation college students than four-year public institutions, with low-income, first generation students re-enrolling at the lowest rate (Engle & Tinto, 2008). Across all institution types, 26% of low-income, first generation students do not re-enroll in post-secondary education after their first year, compared to only 7% of wealthier and non-first generation peers (Engle & Tinto, 2008). Looking at six-year graduation rates for first generation college students, Engle & Tinto (2008) reported that almost half, or 43%, of low-income first generation college students had not attained a post-secondary degree.

First generation college students are more likely to enroll in a two-year institution immediately following high school completion (Engle & Tinto, 2008), often with the intent to transfer to a four-year institution. The initial decision to enroll in a community college is often due to a number of factors, including cost, but research has also shown that many low-income first generation college students are effectively left without a true college choice because they have not completed the coursework required for admission to a four-year university and/or were not provided adequate information and assistance to successfully navigate the college application process (Holland, 2010; McClafferty, McDonough, & Nuñez, 2002; Reid & Moore, 2008). While attending a community college may require less financial investment from students initially, barriers including complex transfer requirements, difficulty enrolling in required transfer courses, articulation agreements, insufficient institutional support for transfer readiness, and inadequate availability of academic counseling made worse by budget cuts and rising enrollments create significant roadblocks to transferring to a four-year institution (Suarez, 2003),

Statistics show that first generation college students who begin their post-secondary journey in a community college are much less likely to complete a bachelor's degree than students who enroll in a four-year institution immediately following high school. Of all low-income, first generation college students who started in a public two-year institution, only 5% went on to earn a bachelor's degree, compared to 24% of their more affluent, non-first generation peers (Engle & Tinto, 2008). The majority of low-income, first generation college students, however, have high post-secondary education aspirations, with 63% of students planning to complete a bachelor's degree and almost

half reporting aspirations for graduate education (Engle & Tinto, 2008). Transferring from a two-year to a four-year institution is a critical piece of the bachelor attainment pathway. The disparity between more advantaged students and first generation students is staggering, with 50% of more affluent students transferring within six years compared to 14% of low-income first generation students (Engle & Tinto, 2008). In order to better assist first generation students in successfully transferring from a community college to a four-year institution, it is critical to understand the factors that propel and impede this population's progress toward transfer.

Theoretical Framework

This study utilizes Critical Race Theory (CRT) and Latino Critical Theory (LatCrit) as the overarching paradigms for understanding the experiences of first generation college students who have transferred from a community college to a selective four-year university. The research design and data analysis is also guided by the theoretical frameworks of Stanton-Salazar's (1997) social networks theory and Yosso's (2005) concept of community cultural wealth. Through the combination of these paradigms and frameworks, this study contributes to higher education research by exploring what resources first generation community college students who transfer to a four-year institution draw on to support their successful navigation of the transfer process. CRT underscores the importance of counter-stories, and through this study, the voices of first generation students who have transferred from a community college to a four-year institution are heard. LatCrit builds on CRT, moving beyond the Black-White binary and recognizing the impact of multiple forms of oppression, including race, class, gender and immigration status (Solórzano & Yosso, 2000). LatCrit is particularly useful for

understanding the experiences of first generation college students because this population is made up of students from variety of demographics and backgrounds. Learning from the lived experience of first generation college students, especially those who persist and continue through post-secondary education, is critical for policy and program development in order to be able to better serve this growing student population.

Critical Race Theory

In the 2001 book *Critical Race Theory: An introduction*, Delgado and Stefancic state that Critical Race Theory was developed in the 1970s when "a number of lawyers, activists, and legal scholars[…] realized that the advances of the 1960s civil rights era had stalled and, in many respects, were being rolled back" (p. 3-4). Delgado and Stefancic (2001) summarize the general principles of CRT:

- Racism is "ordinary, not aberrational" and is difficult to address.
- Our system of white-over-color ascendency serves important purposes, both psychic and material. The idea of interest convergence, meaning that because racism advances the interests of both White elites (materially) and working class (psychically), large segments of society have little incentive to eradicate it.
- Social construction**:** Race and races are products of social thought and relations. Races are categories that are socially constructed, manipulated, and retired when convenient.
- Differential racialization: Dominant society racializes different minority groups at different times, in response to shifting needs such as the labor market.

- Intersectionality and anti-essentialism: No person has a single, easily stated, unitary identity. Everyone has potentially conflicting, overlapping identities, loyalties, and allegiances.
- A unique voice of color: Because of their histories and experiences with oppression, African-American, Indian, Asian and Latino/a writers and thinkers may be able to communicate to their White counter parts matters that the Whites are unlikely to know. Minority status brings with it a presumed competence to speak about race and racism.

Social Capital

The concept of social capital is often used by scholars to understand the differences in educational outcomes between different populations of students (Dika & Singh, 2002). The work of Bourdieu (1977; 1986) and Coleman (1988) provided the foundation for the concept of social capital. Both authors applied their concept of social capital to understanding educational achievement and attainment (Dika & Singh, 2002). While Coleman's (1998) work is most often used in educational research, certain limitations of his conceptualization of social capital make it less applicable when looking at issues of equity in education, and Bourdieu's interpretation is often drawn upon as an alternative to skill deficit and human capital explanations of differing educational outcomes (Dika & Singh, 2002). For this reason, when looking at issues of inequality, Bourdieu's (1977) interpretation is used as a foundation. While both Coleman and Bourdieu recognize the critical role that social ties play, Coleman's (1988) interpretation focuses on norms and structural-functionalist foundation. Bourdieu's work recognizes the importance of having access to institutionalized sources of capital, and it is not

assumed that everyone has the same access (Stanton-Salazar, 1997; Dika & Singh, 2002). While Bourdieu (1986) conceptualizes social capital as a mechanism for social reproduction for the dominant group, Coleman's (1988) interpretation holds that social capital in a more positive light with social capital representing community norms rooted in trust and information channels (Dika & Singh, 2002). For Bourdieu (1977), social capital exists through connections and can be converted into economic capital, and the value of social capital varies depending on the quality and quantity possessed by an individual (Dika & Singh, 2002). Social relationships are the mechanism through which individuals gain access to social capital (Dika & Singh, 2002). Criticisms of the Bourdieusian interpretation of social capital focus on the static naming of social reproduction in that he does not acknowledge or recognize the ways in which marginalized populations resist and challenge the dominant structure (Giroux, 1983). In Stanton-Salazar's (1997) interpretation of social capital, he notes the critical importance of recognizing the ways that social ties are embedded within the larger social structure and thus are affected by "interlocking class, race, and gender hierarchies" (p. 9).

Social Capital and Social Networks

Stanton Salazar's (1997, 2011) network analytic framework is frequently used when studying the educational experiences of first generation college students (see Bensimon & Dowd, 2009; Dowd, Pak & Bensimon 2013; Mmeje, 2012; Pak, Bensimon, Malcom, Marquez, & Park, 2006), and Stanton-Salazar's (1997) concept of "institutional agents" has played a pivotal role in understanding the importance of these people in the educational trajectory of community college students, particularly those who are first generation and students of color (Dowd, Pak & Bensimon, 2013). Through his network

analytic approach, Stanton-Salazar (1997) provides a framework rooted in concepts of social capital and institutional support to provide an understanding of the unique socialization and educational experiences that working-class, minority students experience, and the institutionalized polices and socially constructed practices that act as barriers for students of color in accessing critical institutional support. The crux of Stanton-Salazar's (1997) argument is rooted in the assumption that children need the opportunity to develop relationships with a variety of institutional agents across social sectors for healthy development and adult attainment and that this development is "systematically problematic" for minority children (p. 6). He presents both the reasons why access to capital is problematic as well as the ways that students of color successfully navigate institutional complexities in order to gain access to critical sources of capital in educational settings.

Stanton-Salazar (1997) developed his framework as an alternative to the traditional psychological conceptualization of development that assumed a universal experience of socialization where conforming to American norms is the assumption, without recognizing the differing impact that social forces and institutional norms have on children of color relative to their middle-class White peers (Stanton-Salazar, 1997). Traditionally, liberal psychology has assumed that children develop the necessary internal motivation from their nuclear family, and once this internal drive is in place, success or failure is interpreted as being due to factors such as effort, individual control and merit (Stanton-Salazar, 1997). This interpretation does not acknowledge the differing experiences of children from different cultural and socioeconomic backgrounds

and the unequal access to critical institutional resources students of color experience due to exclusionary institutional practices and policies:

> social antagonisms and divisions existing in the wider society operate to problematize minority children's access to opportunities and resources that are, by and large, taken-for-granted products of middle-class family, community and school networks. (Stanton-Salazar, 1997, p. 3)

Stanton-Salazar's (1997) framework builds on the work of Boykin (1986), and Phelan, Davidson & Yu (1991), which recognize the complex social development that children of color experience including the acquisition of skills necessary to navigate multiple social systems (i.e. home and school community) with independent and sometimes conflicting norms and rules. Stanton-Salazar (1997) frames socialization of urban minority youth through a network analytic framework, placing an importance on institutional agents in the school setting. At the heart of this framework is the concept of social capital. Drawing on work from Bourdieu (1977, 1986) and Coleman (1988), Stanton-Salazar (1997) defines social capital as the "degree and quality of middle-class forms of social support inherent in a young person's interpersonal network" (p. 5), with emphasis on the concepts of social capital and institutional support. A central component of Stanton-Salazar's (1997) framework is the role of significant others in the development and status attainment of children of color. The norms and expectations for how students succeed may differ greatly in the home community and the context of a mainstream institutional community such as a school.

Stanton-Salazar (1997) acknowledges that mainstream U.S. society emphasizes individual effort, merit and motivation, which are often connected back to a student's attitudes, ability and behavior and how well these match what is universally expected within the overarching social institution and is critical of the fact that such systems as

education were set up to reward certain populations (i.e. White, middle class) who are taught norms expected in schools from an early age. While Stanton-Salazar sees the problematic nature of the educational system's false meritocracy and inequitable access to resources, he positions the locus of control for access to success outside of the student and within the formation of a relationship with an institutional agent. According to Stanton-Salazar (1997), in order to succeed in this problematic system, a student of color must have help from a member of the system (i.e. institutional agent). In sum, the development of social ties to institutional agents is crucial to social development precisely because these ties represent consistent and reliable sources from which they can learn the appropriate decoding skills through which they can obtain other key forms of institutional support (Stanton-Salazar, 1997).

In viewing this through a network analytic lens, particular attention is paid to structural constraints and features that impact an individual's development and allows us to question the assumption of individual agency (Stanton-Salazar, 1997). According to Stanton-Salazar (1997), the more students demonstrate behaviors and attitudes congruent with embedded norms of educational institutions which have been shaped largely by White, middle-class leaders, the more likely a student is to be encouraged by those within the school and seen as capable and talented. The early educational experiences are foundational building blocks that students use to make progress toward future educational attainment. The encouragement or lack thereof that children experience in K-12 schooling can have significant repercussions on adult attainment (Stanton-Salazar, 1997). Network formation and the ability and knowledge of how to interact with institutional agents are core components of Stanton-Salazar's (1997) framework. Due to the unequal

distribution of opportunity and the control that social institutions such as school and government exert over access to resources, the role of institutional agents as either gate-keepers or access points for valuable capital is critical, and Stanton-Salazar (1997) focused on the role of socially constructed mechanisms that control access to capital:

> The structural features of middle-class networks are analogous to social freeways that allow people to move about the complex mainstream landscape quickly and efficiently. In many ways, they function as pathways of privilege and power. Following this metaphor, a fundamental dimension of social inequality in society is that some are able to use these freeways, while others are not. A major vehicle that allows for use of such freeways is an educational experience that is strategic, empowering, and network-enhancing. (Stanton-Salazar, 1997, p. 4)

Stanton-Salazar built on his earlier work with his 2011 publication, refining his focus specifically on the role of institutional agents in the socialization process of adolescents. Stanton-Salazar (2011) sees institutional agents as being capable of challenging the impact of social stratification when the institutional agent provides "authentic" social and institutional support (i.e. social capital) and can support students serving as a bridge from one opportunity to another and through advocacy, role modeling, personalized feedback and guidance through the transmission of institutional funds of knowledge (Bensimon, & Dowd, 2009).

Community Cultural Wealth

Stanton-Salazar (1997) focuses on the power of institutional agents and the socially constructed policies that impede the access of students of color. A troubling reality of the power wielded by institutional agents is their ability to influence "social and institutional forces that determine who shall 'make it' and who shall not," (Stanton-Salazar, 1997, p. 11). Though some scholars have criticized Stanton-Salazar's (1997) framework as emphasizing the institutional barriers that prevent students of color from

accessing sources of capital (Gonzalez et al., 2003), Stanton-Salazar's (1997) framework includes specific examples of successful coping strategies demonstrated by marginalized populations, drawing on the work of Anzaldua (1987). This includes resilience, ability to navigate complex and sometimes conflicting social identities, ability to code-switch in different social and cultural settings, and ability to function in multiple cultural contexts while maintaining a strong sense of self (Stanton-Salazar, 1997). Yosso's (2005) theory of community cultural wealth is rooted in similar principles, emphasizing the resources and assets that children of color leverage to successfully navigate complex social structures, including institutions of education. A key difference between Yosso and Stanton-Salazar's orientation is that while Stanton-Salazar acknowledges such characteristics as resilience, decoding, resistance, and the importance of community as coping mechanisms for surviving in an inequitable system, he does not position them as reasons for student success, and as a result does not position the individual student as possessing individual agency. In contrast, Yosso's concept of community cultural wealth is rooted in the recognition that the skills students of color develop in their home community are the very reasons they succeed in an inequitable and racist system.

While Bourdieu's framework maps out how social stratification is maintained and inequality is reproduced, he does not take into account the role of race, or acknowledge the impact of either individual or community actions (Jayakumar et al., 2013), nor does Bourdieu recognize the ways in which marginalized communities challenge the status quo and resist social reproduction (Giroux, 1983). Yosso (2005) builds on Bourdieu's framework using CRT to problematize the neutrality of traditional forms of social capital, highlighting the numerous strengths that communities of color possess and

acknowledging the cultural wealth within marginalized communities. In the schooling process, only certain forms of knowledge and skills are valued. Traditionally, cultural wealth is seen through a narrow lens that places worth on White, middle class values, while over-looking or under-valuing the forms of cultural wealth that communities of color have utilized to survive and thrive in social systems, including educational institutions, that were not constructed with their needs in mind. Building on CRT and the work of sociologists Oliver and Shapiro (1995), Yosso (2005) offers a more expansive view of the capital, worth and value that communities of color possess, including the knowledge, skills, abilities and social network of communities of color allowing them to persevere and survive in the face of both macro and micro forms of oppression. Components of community cultural wealth include: aspirational capital, linguistic capital, familial capital, social capital, navigational capital, and resistant capital (Yosso, 2005). These forms of capital are not exclusive and often overlap (Yosso, 2005).

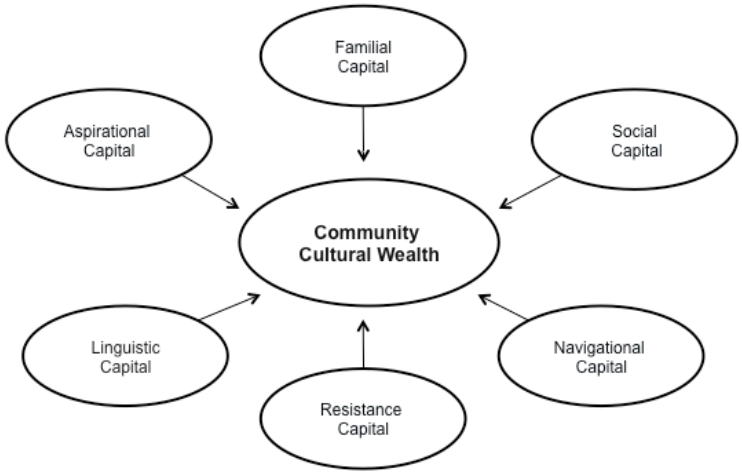

Figure 1. A model of community cultural wealth (Yosso, 2005).

Research Questions

This study examined the experiences of first generation college students, with a particular focus on students of color, who have transferred to a selective four-year institution from a California community college. It drew upon the experiential knowledge of a sample of this population through a mixed methods approach, including a counter-storytelling methodology grounded in CRT and LatCrit. The student experiences are mapped according to the four primary questions that guide this study:

1. What role does the community college play in the pursuit of post-secondary education for first generation college students?

2. What community-based and institutionally based resources do first generation community college students leverage for information to support successful transfer to a selective four-year institution?

3. What community-based and institutionally based resources facilitate motivation and/or encouragement for first generation community college students in successfully

transferring to a selective four-year institution?

4. What, if any, are the perceived barriers encountered by first generation community college students in the process of transferring to a selective four-year institution? What strategies do students use to overcome these barriers?

Delimitations and Limitations of the Study

The primary limitation of this study is that it is restricted to first generation college students who have successfully transferred to a selective four-year institution. In the case of this study the focus was on students who successfully transferred to UC Berkeley, thus excluding data from students who did not transfer to a selective four-year institution, students who were admitted to UC Berkeley and were unable to attend due to other circumstances, and students who transferred to a less prestigious university. The literature clearly shows that community college students transferring to a four-year institution, let alone an elite school, are the exception rather than the rule. Given that graduation from a selective institution has been shown to have a significant impact on lifetime earnings, especially for students from lower socioeconomic backgrounds (Bowen & Bok, 1998; Zhang, 2008), it is important to gain a better understanding of the factors that support first generation college students transferring to a prestigious four-year university.

Significance of the Study

Increasing the rate of post-secondary education attainment is at the forefront of national educational policy, and first generation college students, the majority of whom are students of color, are a growing population (NCES, 2013). Labor force projections predict that a growing proportion of employment opportunities will require at least a bachelor's degree. Coupled with a recent emphasis on the importance of community

colleges in the national post-secondary attainment conversation, even more emphasis will be placed on the transfer function between community colleges and four-year institutions. The California Community College system is the largest educational system in the U.S., and the transfer function has become increasingly important to first generation college students with aspirations of attaining a bachelor's degree (Rendón, 1993). The role of the community college as a gateway to a bachelor's degree for traditionally under-represented students is especially critical given the increasingly constricted access to post-secondary education faced by students of color and first generation following the ban on affirmative action (Jayakumar & Adamian, 2015). In the post-Proposition 209 era, the admission rate for traditionally under-represented students has declined at UC Berkeley (UC Office of the President). The restrictive access climate makes the community college transfer avenue an important one to improve and utilize for increasing racial equity in higher education.

Given the increased importance of admission for community college transfer students who are first generation and traditionally under-represented students, understanding what resources and navigational strategies positively impacted their successful transfer to UC Berkeley is critical. This study also adds to the research that has been done in response to a call from the Jack Kent Cooke Foundation, Lumina Foundation and Nellie Mae Foundation, as well as work that has contributed to informing the Community College Transfer Initiative, with a particular focus on increasing the number of low-income community college students who transfer to highly selective four-year institutions (Dowd et al., 2006).

This study also adds to the literature, as the majority of persistence and retention

literature focuses in a four-year university setting with very little focus investigating the experience of community college students and even less attention paid specifically to first generation students who transfer from a community college to a four-year institution (Crisp & Nunez, 2014). Existing research on transfer has been mostly quantitative, using large, national data sets.

There has been relatively little qualitative investigation in general into the factors that contribute to successful transfer and even less investigation into the factors that contribute to students' successful transfer to an elite university, with notable exceptions including Bensimon & Dowd (2009) and Dowd et al. (2013).

My work builds on the aforementioned studies, which utilize Stanton-Salazar's (1997; 2011) network analytic framework, by utilizing a CRT paradigm and applying Yosso's (2005) community cultural wealth framework. Drawing on traditional interpretations of social capital, the findings of Bensimon & Dowd (2009) and Dowd et al. (2013) focus primarily on external forces, such as relationships with institutional agents, and their impact in a student's journey, which positions the locus of control outside of the student and within the system. With community cultural wealth, the focus is shifted toward the strengths and assets that students of color possess, thus acknowledging and emphasizing the agency of each student and the strength of their home community. Community cultural wealth highlights how these characteristics and abilities propel students through an educational system that is inequitable and not set up to foster their success (Patton et al., 2015). Additionally, Bensimon & Dowd (2009) and Dowd et al. (2013) drew from a small sample size, utilizing intensive qualitative methodology. The current study draws from a larger sample of transfer students at a selective university,

informed by the experience of students who have transferred from a number of community colleges. By using a counter-story methodology from CRT and LatCrit, this study draws on the experiential knowledge of first generation students and emphasizes their voices, which are largely unheard in the mainstream scholarly literature. There are very few studies rooted in a CRT paradigm focused in the community college setting. When searching EBSCO for "Critical Race Theory," "transfer," and "community college," only six published research studies were found. The experiential knowledge gained from this dissertation offers a powerful alternative to the dominant narrative, which is largely rooted in majoritarian theoretical frameworks and assumptions that are pervasive in extant research. Learning from the lived experience of first generation students, especially those who persist and continue through post-secondary education, is critical for policy and program development in order to better serve this growing student population.

Definition of Terms

The following section includes the definition of specific terms used within this dissertation. For many of these terms several definitions exist. For the purposes of this study, the following definitions will be used when referring to these terms.

Aspirational capital is represented in the hopes and dreams for the future for attainment even when faced with real or perceived barriers (Yosso, 2005).

Cultural Capital includes the information and resources that privileged groups utilize to achieve economic capital, ensuring and maintaining their privilege and may be convertible to economic capital. Cultural capital is often institutionalized as educational qualifications, (Bourdieu, 1986, p. 281).

Familial capital draws on the strengths rooted in students' family, both immediate and

extended, and greater community, highlighting the importance of maintaining a strong connection to a student's home community and culture (Yosso, 2005).

First generation college students A first generation college student is from a family where neither parent has higher than a high school diploma" (Gándara, 2002, p. 84).

Institutional Agent An institutional agent is a person who because of their place within a hierarchal system has status, authority, and control of resources. In using their status, authority, resources or available networks, these individuals act as agents when they enable another person to gain access to higher status setting or opportunities (Stanton-Salazar, 2011).

Linguistic capital refers to the communication skills possessed by students of color and represented through the ability to communicate in more than one language or style of communication, including code-switching and the ability to communicate in different cultural environments (Yosso, 2005).

Navigational capital involves the skills needed to negotiate and persist through racially hostile social institutions, including educational institutions (Yosso, 2005).

Resistant capital refers to ways through which students of color challenge inequitable systems through oppositional behavior. One example is persisting through higher education in a system that was not designed with the needs of students of color in mind (Yosso, 2005).

Social capital For the purposes of this study, social capital will be referred to as traditional social capital or social capital from a community cultural wealth perspective. From a traditional perspective, social capital refers to "resources and key forms of social support embedded in one's network or associations, and accessible through direct or

indirect ties with institutional agents" (Stanton-Salazar, 2011, p. 1067). From a community cultural wealth perspective, social capital refers to networks of people and community resources, which can be a source of instrumental and emotional support in the navigation of social institutions (Yosso, 2005).

Transfer agent Building on Stanton-Salazar's concept of institutional agent, a transfer agent is a key institutional member who assists students in navigating the transfer application and academic planning and application process for transferring to a four-year institution (Pak et al., 2006).

Transfer champion Members of the school community committed to equity and the needs of transfer students, including advocating for change in institutional policy and practices to better support students preparing to transfer (Pak et al., 2006).

Summary

In summary, there has been little scholarly attention paid to the experiences of first generation college students who successfully transfer from a community college to a four-year institution. The majority of extant literature on first generation college students takes a deficit approach to understanding the educational experiences of this student population. What is missing is a more holistic understanding of the strengths and assets that first generation college students possess and the reasons for their persistence and success. Increasing post-secondary degree completion is a national priority, and understanding what factors encourage or impede the transfer pathway for first generation community college students, with a particular focus on students of color, is a critical piece of this puzzle.

The following chapter includes a summary of the literature focusing on four primary bodies of literature: (1) Community college context; (2) First generation college students; (3) Transfer and barriers to transfer from community college to a four-year institution; and (4) Understanding transfer through the lenses of social capital and community cultural wealth. This summary provides a context for the current study, which is described in more detail in Chapter III. Chapter IV provides a detailed summary of the study's findings and analysis. Chapter V includes the study's implications, conclusions and recommendations.

CHAPTER II

REVIEW OF THE LITERATURE

Introduction

The California Community College system is the largest post-secondary education system in the U.S. and serves more students of color in California than the CSU and UC systems combined (CPEC, 2008). According to the National Center for Educational Statistics (2009), nearly 15% of all students enrolled in post-secondary education in the United States were enrolled in a California institution, and California community colleges serve nearly 22% of the nation's students enrolled in a public, two-year college (NCES, 2009). Few community college students transfer to selective institutions (Dowd & Melguizo, 2008), and most students who enter community college with transfer aspirations do not transfer (U.S. Department of Education, 2005). Research has shown that students enrolled in the most selective post-secondary institutions are correlated with race/ethnicity and socioeconomic status (Bowen & Bok, 1998; Bowen et al., 2005; Kahlenberg, 2004), and previous research has shown that students who graduate from more selective institutions earn more than those who graduate from less selective universities (Zhang, 2008). Graduating from an elite university is also often an entry point to leadership positions (Dowd et al., 2006). The majority of students in California begin post-secondary education in a community college, and the state's inefficient transfer system creates a daunting barrier, often preventing students with high aspirations from meeting their goals (Moore et al., 2009). Therefore gaining a greater understanding the factors that lead to the successful transfer of first generation college students from a community college to selective four-year institutions is of critical

importance given that first generation students are more likely to begin post-secondary education in a community college.

Given the changing demographics of students enrolling in post-secondary education, it is imperative that staff, faculty and administration who are members of a higher educational institution gain a holistic understanding of the factors that shape the educational pathways for first generation students and gain an understanding of the obstacles commonly faced in order to be able to connect with and holistically serve the students while paying particular attention to the support models that encourage successful transfer of first generation students from a community college setting. The following literature review includes an overview of the following topics: (1) Community college context; (2) First generation college students; (3) Transfer and barriers to transfer from community college to a four-year institution; and (4) Understanding transfer through the lenses of social capital and community cultural wealth.

Community College Context

The intent and vision of the 1960 California Master Plan formalized the role of each type of higher educational institution within California, with the UC system designated as the primary academic research institution, the State system's primary mission of undergraduate and master's education, and the community college system's function to provide lower division coursework for academic and vocational education, along with remedial instruction, adult education, and English as a Second Language instruction (University of California, 2002). Included in the Master Plan are stipulations about the transfer function, indicating a specific ratio of students (freshmen and transfers) to be admitted, with priority given to community college transfers for upper division

coursework over freshmen. The plan's intent is that every eligible transfer student from a California community college is provided a place in a four-year California public institution. While the intent of the California Master Plan is clear, in practice, the process of transferring from a community college to a four-year institution is complex and challenging due to a confluence of factors. While many praise community colleges as "democracy's college" (Cohen & Brawer, 2003), critics of the community college system focus on the fact that the transfer rate remains at a stubborn 25% (Wassamer, Moore & Shulock, 2004). Transfer rates in general are low, and those for first generation and students of color are abysmal (Crisp & Nunez, 2014). Despite the fact that post-secondary educational aspirations for all ethnic groups and socioeconomic levels have increased since 1989-90, especially among students who are African American, Latino/a and Asian/Pacific Islander and low-income students (Horn & Skomsvold, 2011), 22% of students transferred from a community college after five years, and the rate for Latinos and African American students was much lower (California Postsecondary Education Commission [CPEC], 2007). This is especially troubling given the over-representation of first generation, low-income students in community colleges. For this student population, the transfer function has historically been a critical gateway to a bachelor's degree (Rendón, 1993; Dowd et al., 2006).

The role of the community college has been decried as either dampening the aspirations of students who get lost in the carousel of remedial coursework or praised for providing an open-access admissions policy and serving as the democratizing force in post-secondary education (Cohen & Brawer, 2008; Cohen, Brawer & Kisker, 2014; Brint & Karabel, 1989). Because of the diversity of students community colleges serve, these

institutions fill an integral role in post-secondary education and have the opportunity to focus on issues of equity and access for traditionally underrepresented student populations, and to engage students who are often left under-prepared after graduating from under-funded and under-resourced K-12 institutions (Bell, 2010; Goldrick-Rab et al., 2009). It is not enough, however, for articulation agreements to exist and for transfer to be a possibility; if community colleges truly are to equalize the playing field, the transfer pathway that is filled with structural holes must be improved (Dowd et al., 2013), especially as the measure of success in post-secondary education shifts from access to completion (Bragg & Durham, 2012).

Multiple missions and often competing priorities for community colleges have led to contradictory interpretations of the colleges' role of effectiveness within the larger post-secondary education system. Some scholars contextualize the history of the community college system as a system that was set up to function in conjunction with the state four-year post-secondary institutions so that students completed two years in a community college and then transferred to a four-year institution as a junior and frame the high rate of student enrollment as evidence of students' "willingness to use these institutions as an essential part of their strategy to earn a bachelors degree" (Handel, 2013, p. 9). But what is often overlooked is the fact that many students enter the community college system not as a choice but by default. By the time many first generation college students and students of color graduate from high school, they may not have a choice of attending any other type of post-secondary institution due to such factors inadequate college counseling in high school, limited financial resources and unfamiliarity with the requirements or availability of other avenues of post-secondary education (Ceja, 2006;

McDonough, 1997; Dowd et al., 2006; Dowd et al., 2013; Gonzalez et al., 2003; Rowan-Kenyon, Perna & Swan, 2011).

Other interpretations hold that the junior college or community college system was constructed to limit access to the more prestigious four-year institutions (Brint & Karabel, 1989; Clark, 1960). Jain (2009) employs CRT as a means for analyzing the structure of community colleges in order to emphasize the reality that these educational institutions are not color-blind but rather the way students, in particular under-represented students of color, are served and educated within the system is influenced by historically rooted structural inequalities that influence current cultural practices. Even Cohen & Brawer (2008), who primarily present the community college as neutral and commonly refer to its role as democratic, acknowledge the critique leveled at community colleges in the under-performance of students of color within the system as an indication of the "racist" nature of the institutional policy and structure (p. 423). The intentions of community college students have been sometimes characterized by researchers and policy makers as either unstable or inauthentic, however within the published history of transfer throughout the past several decades, the majority of students beginning their post-secondary journey in a community college have indicated the desire to transfer (Brint & Karabel, 1989; Medsker, 1960). Implying an inauthenticity of students' original intentions perpetuates the cycle of blaming the student for not achieving or not attaining the transfer goal without examining the various policy, programmatic and previous educational experiences that impact that post-secondary pathway for community college students, many of whom are first generation college students. The majority of scholarly literature paints with a broad brush about students' abilities and so-called shortcomings,

either implicitly or explicitly blaming them, their family or broader community. This is why it is critical to examine community college transfer through a critical lens, applying CRT and community cultural wealth to gain a more holistic understanding for the factors influencing the achievement gap.

In response to the persistent outcomes gaps between traditionally under-represented students and their White peers, Haberler & Levin (2014) sought to investigate and identify promising practices across five community college campuses, utilizing a framework of educational ecology, organizational and historical-cultural perspective. Haberler & Levin (2014) highlighted promising practices from a variety of program types within the community college system, analyzing the practices within regional and political contexts and accounted for the community college's multiple missions, something that is not consistently done in community college research. Data was gathered from programs encompassing workforce preparation, English as a Second Language (ESL), academic support and transfer, thereby avoiding previous short-comings of previous research that took a more narrow approach, only identifying/surveying particular sectors of community college (Haberler & Levin, 2014). Through purposeful sampling, the authors identified six promising community college programs including ESL at City College of San Francisco, basic skills development through Success Centers at Chaffey College, transfer through Adelante Program at Santa Monica College, Fashion program at LA Trade-Technical College, and Accelerated Careers in Technology at Modesto Junior College. Data collection primarily consisted of one-on-one semi-structured interviews with members of the school community, including

faculty, administrators, professional staff, and students. Focus groups, observations and document analysis were also conducted.

The promising practices identified by the authors are: cohesion, cooperation, connection, and consistency. Cohesion refers to collaboration and cohesion among administration, faculty and staff. Cooperation speaks to strong teamwork and commitment among members of campus departments. Connection refers to building and maintaining connections with community and industry in order to advance program goals. Consistency speaks to stable and predictive actions of programs, and connection encompasses relationships with businesses, and broader communities to help prepare students to work in the surrounding community and industry. The promising practices suggested by Haberler and Levin (2014) are noteworthy and backed by numerous studies that highlighted the importance of representation and cultural integrity (Dehyle, 1995; Hagedorn & Cepeda, 2004; Tierney & Jun, 2001), access to academic support and information (Hagedorn, Perrakis, & Maxwell, 2002; Hagedorn, Lester, Garcia, McLain, & May, 2004; Perna, 2000; Rowan-Kenyon, Perna & Swan, 2011), and an educational community that is built around high expectations (Dowd, Pak, & Bensimon, 2013; McDonough, & Nuñez, 2002). This study presents high-impact practices for a variety of programs within the California community college system. However, while Haberler & Levin (2014) acknowledge that the achievement gap is a result of structural inequality, the theoretical lens utilized in this study does not provide a framework to analyze the systematic inequalities that contribute to the outcomes gap and does not include a critical understanding of such troubling realities as differential treatment (i.e. tracking, low expectations) that contribute to inequitable outcomes for different populations of students.

More work is needed to understand the student experience of navigating and persisting through an inequitable system.

To understand the ways that different populations of students experience access to opportunities and support in the community college setting, specifically students of color, Jain (2009) drew on CRT to examine the relationship between race, gender and the transfer process between two-year and four-year institutions. Jain's (2009) study, which is one of the few utilizing a CRT framework to understand the community college transfer function, analyzes the experience of women of color who are student leaders in the community college setting and their experience in exploring the transfer function. Jain (2009) employs CRT as a means for analyzing the structure of community colleges in order to emphasize that these educational institutions are not color-blind, and the educational experience of students of color is influenced by outside labor market forces as well as historical effects of institutional racism (Ornelas & Solórzano, 2004; Rendón, 1994; Villalpando, 2004). The data presented in this study was part of a larger study examining the intersectionality of race, gender, student leadership and transfer (Jain, 2009). The author interviewed 11 participants, who are women, students of color and student leaders at one community college with a high transfer rate. Interviews with the participants were conducted twice, each at a point in the academic year that is key for transfer readiness. Jain (2009) chose participants who fit the overall demographics of national community college students. The author also conducted focus groups, observations of the participants during club meetings, and utilized information from social media channels as well.

Jain's (2009) findings show us that not all students are given the necessary information to work towards transfer eligibility. Some institutions may have impressive transfer statistics, but not all student populations are encouraged to pursue the necessary coursework and given the information early on to set that plan in motion. Key findings included that students of color experienced self-doubt in their academic ability as a result of the messages received either implicitly or explicitly by members of the educational institution, including faculty, staff and administrators. Jain (2009) is clear to point out that the feelings of self-doubt or questioning one's ability that students of color reported in the study are a result of organizational structures and messages, and not a reflection of the innate ability or potential of the students themselves. Students reported spending several years in a community college without an awareness of what coursework would count toward transfer credit or what mechanisms were required for students to access in order to transfer eligible. This was described by students as a result of not knowing who to talk to as well as feeling afraid to inquire due to feelings of inadequacy (Jain, 2009). Through employing CRT to understand the experiences of community college students who are first generation students of color, a richer understanding of the impact of race and racism on the shaping and development of career and educational aspiration can be gained (Jain, 2009).

This study highlights the inequitable transfer preparation experiences of students of color as a result of institutional policies and practices and institutional actors. While Jain's study focused specifically on the experiences of female student leaders, more work needs to be done to expand the understanding of the experiences of a broader population

of first generation students of color preparing to transfer from a community college to a four-year institution.

Summary

Community colleges serve the majority of students of color in higher education across the United States (Provasnik & Plenty, 2008), and in California, community colleges are the primary type of post-secondary institution for all ethnic groups (California Tomorrow, 2002). Despite this, students of color transfer at a lower rate than their White peers. Findings from a study conducted by Jain (2009) show us that not all students are given the necessary information to work towards transfer eligibility, and while some institutions may have impressive transfer statistics, not all student populations are encouraged to pursue the necessary coursework and given the information early on to set that plan in motion. And while the community college is the main point of access for post-secondary education for students of color, relatively few of these students are completing an associate's degree or transferring to a four-year institution despite high aspirations (Jain, 2009).

First Generation College Students

Research has shown that low-income, first generation college students are likely to attend under-resourced K-12 schools that lack sufficient resources and infrastructure to adequately prepare students for college (Gándara, 2002; Oakes, Rogers, Lipton & Morrell, 2002). This holds true both in terms of academic rigor and the presence of a college-going culture (McClafferty, McDonough, & Nuñez, 2002). An additional challenge for low-income, minority students is the tracking system that exists within the K-12 educational system (Oakes, 1985). Due to this system, low-income students are less

likely to receive the necessary guidance and information as well as the academic preparation in order to be eligible to enroll in post-secondary education immediately following high school graduation (McDonough, 1997; Oakes & Lipton, 1996). Additionally, the first generation students who do go on to post-secondary education are more likely to leave higher education than their non first generation peers. First generation status has a similar impact on outcomes as being in fourth quintile in high school graduating class versus first quintile (Ishanti, 2006).

First generation college students must navigate numerous barriers that non-first generation college students do not face, including experiencing deficit orientation and low expectations within the educational system (Green, 2006). In order to combat the dominant narrative focused on what first generation, low-income students of color lack, numerous researchers have emphasized the strengths and assets that these students bring with them into an educational setting (see Moll, Amanti, Neff & González, 1992; Yosso, 2005) and the difference and positive impact that can transpire when administrators and teachers hold high expectations for all students (Nieto, 2002; Ladson-Billings, 1994; Valenzuela, 1999). Research has consistently shown the positive impact of participation in a bridge program, (i.e. Upward Bound, AVID or other community-based programs), can have in helping students re-build confidence and gain access to academic preparation and college knowledge to ease the transition to post-secondary education (e.g. Dansby & Dansby-Giles, 2011; Pitre & Pitre, 2009; Walsh, 2011; Zulli & Frierson, 2004).

First generation college students differ from and face unique challenges as compared to non-first generation students, including: (1) applying for college without the assistance from parents; (2) lack of preparation for what to expect in college; (3) lack of

access to rigorous academic preparation; (4) differences in self-esteem; and (5) more often living at home and/or working during college (Reid & Moore, 2008). In order to help students overcome these barriers, first generation college students need to have the necessary social and academic support networks in place to help them begin planning for college early in their schooling, including accessing a rigorous academic curriculum and gaining information about requirements for college entrance (Holland, 2010; McClafferty et al., 2002; Reid & Moore, 2008). It is critical for students to be supported and encouraged by family and school personnel, but this must be augmented by academic preparation and guidance through the college application process in order for a student to reach his or her post-secondary educational goals (Holland, 2010).

Pre-college Educational Experience of First generation College Students

Green (2006) discusses the far-reaching and damaging effects of the deficit model, which characterizes the populations of minority, first generation, and low-income students as lacking in skill and ability to succeed in higher education. The deficit model emphasizes the students' weaknesses rather than their strengths, and the students are viewed as "less than" their White, higher-income peers. The majority of educational institutions have been set up by predominantly White administrators and are rooted in middle-class values and norms with students coming from middle-class resourced communities in mind (Solórzano & Yosso, 2002). When students of color struggle or do not reach their potential in a meritocracy that is set up to reward students from well-resourced communities, negative stereotypes of people of color are perpetuated, and the student is blamed for individual shortcomings when in reality the whole system has been set up with the odds stacked against them (Solórzano & Yosso, 2002). As a result of the

deficit model, students encounter staff, faculty and systems that emphasize what they lack, rather than their areas of strength. In a deficit model students are not provided with opportunities to critically think and solve problems on their own without penalty (Green 2006).

Jayakumar et al. (2013) found that students in the Young Black Scholars (YBS) program benefitted from program participation as YBS prepared students for college in a culturally relevant way that the students did not experience in their high school setting. YBS participants were mostly from middle- and high-income families and attended schools with college preparation resources in place. YBS participants reported that the support and encouragement gained from YBS was a more significant resource for their college preparation than what they received from their school. A critical component of YBS is the focus on instilling an awareness of the realities of race in the United States educational system and how to navigate the associated challenges. The program helps students do this by offering programming including mentoring, inviting community speakers, and incorporating cultural resources in order to engage students in a positive process of socialization, both from a race and academic standpoint (Jayakumar et al., 2013). Jayakumar et al. (2013) noted that the YBS program embodied Yosso's (2005) principles of community cultural wealth by providing opportunities for students to build their aspirational capital, familial capital, social capital, linguistic capital, resistant capital and navigational capital. This study maps out the experiences of students accessing community cultural wealth, affirming student and community agency and capital, in creating supportive pathways from high school to four-year institutions. However, more

work is needed to extend this understanding to include students whose pathway involves a bridge that is the community college system.

Gonzalez et al. (2003) sought to better understand the educational outcome gap for Latina students through employing a social capital framework to understand the impact of primary and secondary educational experiences on students' post-secondary opportunities and pathways. The study focused on types of social capital available to Latinas in their K-12 educational experience, the sources and opportunities for Latinas to gain social capital, and the amount of social capital that different types of resources or institutional agents possessed, and the impact that these sources of social capital had on post-secondary pathways for Latinas from working-class families.

Gonzalez et al. (2003) found that university-bound Latina students had access to high volume sources of social capital early in their educational experience through the GATE program and supportive institutional agents such as teachers. In contrast, community-college bound students in this study did not have access to the same resources and instead experienced institutional neglect or abuse through placement in ESL or special education classes, which precluded them from accessing the same information and resources as their peers in the GATE program. In the end, all students in the study demonstrated their potential for entrance to a four-year university as all community-college bound students transferred to a four-year school. The implications of this study highlight the importance of early educational experiences on the post-secondary pathways for Latina students. In particular, the findings encourage a re-examination of the under-representation of Latinas in GATE, honors and AP courses, and the over-representation of Latinas in special education and ESL courses.

This study establishes the importance of students accessing valuable sources of institutionally based social capital early in their educational experiences. However, more work is needed to explore what sources of institutionally based capital make an impact in the transfer pathway for community college students, as well as what aspects of community cultural wealth influence a student's successful transfer to a four-year institution.

Summary

Students enroll in a community college after high school graduation for a variety of reasons and with a multitude of motivations. Research has shown the detrimental impact that low expectations and insufficient access to resources have on students' post-secondary educational trajectories. Alternatively, studies have shown how access to information, structured support and high expectations positively impact the post-secondary attainment of first generation college students. For the purposes of the current study, understanding how previous educational experiences in educational institutions is important because often students arrive at college in need of targeted academic support and culturally-relevant support in order to gain awareness of the full spectrum of educational pathways available to them.

Community College Transfer

The following section reviews research on community college transfer, providing a broad macro view of issues related to transfer and common barriers that students aspiring to transfer to a four-year institution face. Studies in this section are based on large quantitative data sets and focus on student and institutional characteristics related to transfer. Key qualitative research studies with a particular focus on the role of traditional

social capital in successful transfer are then reviewed, followed by a review of studies utilizing a community cultural wealth framework with relation to post-secondary persistence and transfer.

Despite the low number of students successfully transferring to four-year institutions, the aspirations of community college students remain high (Hagedorn et al., 2004). In order to better understand the factors that contribute to the outcomes gap for students who enter community college with high aspirations, researchers have investigated the factors that impede transfer, both from an organizational and structural point of view and from the perspective of student-level characteristics. Both individual circumstances, including students changing goals or not having awareness of availability of options, as well as availability of institutional resources contribute to the low transfer rates between community colleges and four-year institutions (Hagedorn et al. 2004). From a CRT perspective, low transfer rates are the intended outcome of the structure of the post-secondary education system. As Jain (2009) has contended, certain groups of students are given information about transfer and encouraged to transfer, while other groups are not. Gándara et al. (2012) note that while some community college campuses are "high transfer," these campuses are often concentrated in the suburbs and enroll a more affluent and well-resourced student population.

Drawing on nearly 30 years of literature review, a meta-analysis conducted by Pascarella & Terenzini (2005) found that students who started at a community college were 15-20 percent less likely to complete a bachelor's degree. Students who successfully transferred to a four-year institution, however, were just as likely to graduate as those who started as native freshmen but were disadvantaged in terms of time to

degree (Pascarella & Terenzini, 2005). In analyzing 1980 High School and Beyond data, Hilmer (1997) found that students who transferred from a community college to a four-year institution often transferred to a more prestigious four-year institution than they would have been accepted to directly from high school. This pattern was significant for students from lower socioeconomic backgrounds and who performed lower on standardized tests and/or GPA in high school. While this may be true, the persistently prevailing pattern has been that few community college students transfer to selective institutions, and those who come from lower socio-economic backgrounds are less likely to transfer in general (Dowd & Melguizo, 2008). In analyzing national data, Dowd & Melguizo (2008) found that when comparing low-income community college transfer students and their low-income peers who entered a selective institution as true freshmen, the two populations were equally likely to complete a bachelor's degree, however, the community college transfer students were more likely to complete the degree in less time.

Barriers to transfer are numerous for community college students. Researchers have categorized them as follows: economic, structural, informational, relational and cultural (Bensimon et al., 2007; Pak et al., 2006). Economic barriers refer to the misconceptions that students have about the cost of post-secondary education and resources available to help finance tuition for a four-year school. Structural barriers include a complex transfer process, course articulation, admissions requirements, and availability of resources to support navigating the process. Informational barriers includes students' lack of awareness of important information regarding transfer and where to find the information. Relational barriers include the reality of many first generation students whose family members do not have the information to help guide

students through the transfer process. Because of this, the role of institutional representatives becomes even more critical. Cultural barriers refer to the organizational culture of a community college and whether institutional resources are directed toward supporting transfer, which can be evident through structural or informational aspects (Ornelas & Solórzano, 2004).

Moore et al (2009) provide an overview of the challenges that inhibit the transfer process for students, identifying key barriers including: differing general education (GE) requirements and different major pre-requisites between campuses, which makes it incredibly challenging for students to meet requirements at multiple school which are effectively a "moving target" for students; under-funding and under-staffing of student support services, which leaves students with inadequate support to navigate a complex transfer process, and students often taking more courses than they need to remain eligible for multiple majors or multiple four-year universities.

Recent research has demonstrated a positive relationship between the following factors and transfer to a four-year institution for community college students: socioeconomic status (Wang, 2012; Roksa, 2006; Eddy, Christie, & Rao, 2006), higher degree aspirations (Dougherty & Kienzl, 2006; Porchea, Allen, Robbins & Phelps, 2010; Roksa, 2006), full-time enrollment (Dougherty & Kienzl, 2006; Porchea et al., 2010; Wang, 2012), and parent education levels (Porchea et al., 2010). Factors that have been shown to be negatively related to transfer include having family obligations (Dougherty & Kienzl, 2006; Wang, 2012; Roksa, 2006), or work obligations (Dougherty & Kienzl, 2006), being female (Dougherty & Kienzl, 2006; Eddy, Christie, & Rao, 2006), and enrollment in a vocational or certificate track in a community college (Dougherty &

Kienzl, 2006). Gándara et al (2012) notes that the lives of students of color are more likely to include factors negatively associated with transfer. While numerous studies have found that prior academic achievement is a critical predictor in educational attainment (Pascarella & Terenzini, 2005), Wang (2012) found that despite aspirations for attaining a bachelor's degree, socioeconomic status trumps race/ethnicity and gender as the biggest negative predictor of transfer. The findings suggest that even if students enter a community college with the goal of attaining a bachelor's degree, students from lower socioeconomic backgrounds are less likely to achieve their goals compared to their more affluent peers.

In one of the few key transfer studies that does not rely exclusively on pre-college characteristics, Porchea et al. (2010) examined the relationship between student characteristics and enrollment and degree outcomes for students who begin their post-secondary education at a community college using data from Student Readiness Inventory (SRI). The authors looked at how various factors impact student's academic outcomes, including: academic preparation (high school grades, standardized test scores), psychosocial factors (motivation, self-regulation, socialization), socio-demographic (gender, race/ethnicity, age, SES, parent educational level), situational factors (degree expectations, enrollment status, hours worked, and proximity to school).

SRI data was from students who matriculated in a community college in 2003, with a sample of 21 colleges and 4,481 students. SRI is a self-report instrument with 108 likert-type items. In order to track five years of outcomes, including enrollment, degree, and transfer outcomes, the authors used data from National Student Clearinghouse (NSC). Key findings included: the more academically prepared students are, the more likely they

are to attain a community college degree and transfer to a four-year institution; students with higher academic discipline and commitment to college are more likely to persist and transfer; students from higher SES backgrounds are more likely to transfer; non-first generation students are more likely to transfer; full-time enrollment is initially linked to persistence (regardless of transfer); students with higher degree expectations are more likely to transfer. The findings from Porchea et al's (2010) study are consistent with a number of previous studies. The unfortunate reality is that first generation college students are less likely to possess the characteristics research has shown that predict likelihood of transfer (see Bailey, Jenkins, & Leinbach, 2005; Dowd et al., 2006; Gándara, 2002; Gándara et al., 2012). This emphasizes the importance of targeted support from individuals in the community, college administration and the greater educational system structure to support traditionally under-represented students in persisting in a post-secondary system set up to reward students from more privileged and well-resourced backgrounds (Solórzano & Yosso, 2002; Stanton-Salazar, 1997).

Statistics show a disparity between the rate of successful transfer for students of color and their White and more privileged peers. Crisp and Nunez (2014) sought to understand the specific factors that contribute to the racial transfer gap, a term coined by Martinez-Wenzl & Marquez, (2012). Conceptualizing vertical transfer as a type of persistence, Crisp and Nunez (2014) note the short-comings of Tinto's theory of persistence in holistically capturing the complexity of the experience of students of color in post-secondary education and instead draw on Nora's (2004) model of persistence, which focuses on the interaction between the student and institution and the impact that this interaction has on transfer, persistence and other educational outcomes. Nora's

(2004) framework holds that students bring with them pre-college characteristics including (1) high school experiences, (2) financial situation, and (3) psychosocial factors. Once students begin post-secondary education, their likelihood for persistence is impacted by a number of "environmental pull" factors, including working and family obligations, which pull them away from immersing themselves in the college social and academic environments (Nora, 2004). This is especially true for traditionally under-represented minority community college students.

While it has been well established in the literature that transfer is influenced by a combination of socio-demographic, pre-college, college experiences (social and academic), pull factors and degree expectations, little is known about how college experience impacts vertical transfer (Crisp & Nunez, 2014). While it is widely known that there is an inequality in transfer rates for White students and students of color, studies have not typically disaggregated outcomes by race (Crisp & Nunez, 2014). Crisp and Nunez (2014) fill this gap by comparing variables impacting under-represented minority (URM) students and White students' vertical transfer using national data. Using BPS 04/09 for student-level transfer info and institutional level from IPEDS from 2003-04, the authors analyzed data from 1,360 students and 260 institutions. All students began community college in 2003-04, reported intention to transfer and earn a bachelor's degree or higher, and were younger than 24. Students included were all either White, African-American or Latino. Student-level characteristics included in the analysis were socio-demographic variables, pre-college academic factors, environmental pull factors, degree expectations, and academic and social experiences. Institutional level factors analyzed included academic and social environment, and campus characteristics

(enrollment size, percent URM faculty, percent of full-time faculty, and academic support), socio-demographics (percent URM students, percent female students and percent of students who received federal aid), and institutional climate as measured by average institutional probability of persistence. Using hierarchical generalized linear modeling, the authors found differences between White and URM student characteristics and institutional level and vertical transfer rates. The findings highlight inequities in transfer success, as there were more differences than similarities in predicting transfer for White students as compared to URM.

The authors found differences in the variables that most impacted the educational trajectory for minority students compared to their White peers, which suggests that existing theory for White transfer students outcomes may not be as applicable for predicting URM students' trajectory and speaks to the need for a persistence theory for URM students specifically. Crisp and Nunez (2014) offer alternative concepts such as validation (Rendón, 1994) and "socio-academic integrative moments" (Deil-Amen, 2011, p. 15) as strong predictors for URM transfer instead of Tinto's integration theory, underscoring the importance of campus climate and diversity in the educational experience of minority students. Another significant finding is the negative relationship of URM students enrolled in vocational program and transfer. Enrollment in a vocational program did not negatively impact likelihood of transfer for White students. Given that URMs are disproportionately tracked into vocational programs, this is especially important for campus leaders and policy makers to be aware of (Villalpando, 2004). One of the most important findings from this study is the fact that college environment and experiences, not precollege factors, have a more significant impact on first generation and

minority students' outcomes than for continuing-generation students or White students. This finding further underscores the need for cultural specific support mechanisms such as the Puente Program on community college campuses. Crisp and Nunez (2014) found that key community college functions and supports that encourage the successful transfer of minority students include academic advising, support from "transfer agents" (Dowd et al., 2006) the creation of a "transfer culture" to promote transfer for URM (Ornelas & Solórzano, 2004), and a campus climate that promotes a sense of "belonging" and promotes high expectations for students of color (Gándara et al., 2012). This study makes important contributions in understanding the factors that influence transfer specifically for URM students based on data from a large national dataset. More work is needed to highlight the lived experience of the students navigating the transfer pathway, with particular focus on how students utilize their strengths and resilience to navigate the barriers within the post-secondary educational system.

Large-scale quantitative studies based on national datasets provide insight into patterns and factors associated with transfer. Depending on the study and the definition of how success is measured, contradictory conclusions have been drawn regarding the student-level factors that predict transfer. Regardless of the analysis, the number of traditionally underrepresented students transferring from a community college to a four-year institution is disturbingly low, and it is clear that this student population enters post-secondary education with a complex set of personal circumstances that often interfere with achieving their academic goals due to the structure of the educational system. Despite high educational aspirations for themselves and from their family, traditionally under-represented students face a far steeper challenge in persisting in community

college and ultimately transferring to a four-year institution. To gain a broader understanding of transfer, literature focusing on institutional factors must also be considered.

Barriers to transfer are often categorized as existing within individual or personal circumstances or institutionally based (Hagedorn et al., 2004). In the individual situated framework, the student is seen as not having the necessary study skills or academic preparation, has not had access to critical information about post-secondary education, or faces financial obstacles (McDonough, 1997). The institutional perspective highlights the organizational and systematic barriers that impact a student's persistence to transfer. Institutionally based barriers often cited include limited access to information about transfer, unavailability or limited availability of courses needed to transfer, limited faculty involvement, complex transfer/articulation agreements, and inadequate academic advising (Rendón & Matthews, 1989; Nora & Rendón, 1990). In 2002, the California Community College system evaluated the transfer function system wide. While 95% of the reporting colleges indicated the transfer function at their school to be satisfactory, each school indicated the need for additional resources dedicated to transfer (CCCCO, 2002). A 2007 report from the California Postsecondary Education Commission (CPEC) reviewing community college transfer made recommendations to improve the transfer function, in response particularly to the low rate of low-income and Latino students transferring to four-year institutions. Recommendations included: improving targeted programming for students intending to transfer; providing a more clear guarantee for transfer, including partnerships with four-year institutions; and providing more holistic

and targeted student support systems for student populations who have historically had less successful outcomes.

Students' understanding and awareness of articulation and course transferability between community college and four-year university is of critical importance in the transfer preparation process, as course articulation is a major hurdle in gaining entry to and making timely progress through a four-year institution (Crisp & Nunez, 2014; Wang, 2012). While California has established articulation agreements between its community colleges and four-year public institutions, transfer students still face a complex web of fulfilling pre-requisites for more than one major or meeting entrance requirements for multiple four-year institutions when preparing for transfer (Cohen & Brawer, 2008). Students often attend more than one institution before transferring to a four-year institution, thus making course transferability especially critical in determining persistence and advancement within the post-secondary journey (Cohen & Brawer, 2008). This points to the increased importance of institutional agents including counselors, faculty and administrators to help students navigate the transfer pathway (Dowd et al., 2013). Without an understanding of transfer requirements and access to counselors who take time to explain accurate and current information, it is nearly impossible for a student to successfully transfer.

Hagedorn et al. (2004) sought to understand the role of transfer centers on community college campuses through the Los Angeles Community College District (LACCD) and the ways the centers support students in transferring to four-year institutions. Hagedorn et al (2004) investigated the effectiveness and utilization of transfer centers at community colleges in LACCD as part of the larger Transfer and

Retention of Urban Community College Students (TRUCCS) Project. The TRUCCS project is a longitudinal study of 5,000 students enrolled in nine campuses of the LACCD. The purpose of TRUCCS is to investigate the factors, both individual and organizational, that promote retention and persistence of urban community college students. TRUCCS also examines other related patterns and phenomenon including reverse transfer, social integration, remediation, and course-taking patterns. The TRUCCS project is situated within LACCD, as it allows data to be gathered on a diverse student population (i.e. ethnicity, gender, SES, and age). TRUCCS is based on a 47-item questionnaire, and data was collected from Spring 2001 to Fall 2002, combining student responses with transcript data (actual behavior) in order to provide a clear understanding of student outcomes.

For this study, transfer center directors and focus groups with students were conducted. The authors' findings highlight key barriers that exist in the transfer process, including student knowledge about transfer and support resources, academic preparation and finances. Structural limitations from the transfer centers' staff administrators perspective include institutional support, availability of staff and other resources to support students, including connecting students to four-year institutions and having enough staff to meet needs of students and be visible on campus. Students noted the challenge of fulfilling transfer requirements in general to prepare for specific majors at different four-year institutions. Students expressed frustration and discouragement with the amount of time it often took to fulfill transfer requirements, especially when beginning in remedial courses (Hagedorn et al., 2004). One particularly noteworthy finding was that the amount of information students possessed about transfer requirements and post-secondary education when entering community college impacted

their perception of the opportunities and resources available on campus. Students talked about the importance of knowledge gained through networks, including friends, peers, and siblings, and awareness of existence of transfer center (Hagedorn et al., 2004), which exemplify traditional forms of social capital (McDonough, 1997; Stanton-Salazar, 1997).

Hagedorn and Cepeda (2004) investigated the factors that support Latino/a students' transfer from community college to a four-year institution, given the large proportion of Latino/a students enrolled in community colleges and the relatively low percentage who transfer to a four-year school. Using TRUCCS data from LACCD, a district where nearly 50% of the 5,000 students identify as Latino/a, the authors found statistically significant differences between Latino and non-Latino TRUCCS respondents drawing from both questionnaire and transcript data. When comparing data from Latino/a students and non-Latino/a students, Latino/a students had lower high school grades, were less likely to have taken college-level math or science, and were less likely to be enrolled in college English. These differences were present even when taking out students without transfer as goal. Though Latino/a students were as likely as their Caucasian peers to have high educational aspirations, they were more likely to be working full-time and have a lower GPA than their non-Latino/a peers. Findings highlighted the positive impact of enrichment and academic support programs specifically targeting Latino/a students, including the pre-engineering program at East Los Angeles College, the middle college high school, and the Puente Program. Particularly effective and impactful aspects of the aforementioned programs include mentoring, academic support, access to alumni and role models and an academic community, emphasizing the role of access to reliable

and accurate information as a critical factor impacting the likelihood of transfer for Latino/a students.

Hagedorn, Perrakis, and Maxwell (2002) drew on data from interviews and focus groups with administrators, faculty and students at nine institutions within LACCD through the TRUCCS project in order to highlight promising practices of community colleges that support the success of community college students. Noteworthy practices highlighted include the importance of: faculty-student interaction; offering affordable education together with multiple forms of financial aid; offering flexibility in course times and offerings to suit student demand; maintaining accessible and up-to-date transfer information centers; promoting student study skills and academic preparation through on-campus assistance with writing, computer skills, and learning resources; and exposing students to diverse career paths and employment opportunities through career days, fairs, and career counseling. The authors underscore the importance of students having access to knowledge and information regarding their options within the community college and beyond and the importance of the information being reliable and current. Particularly for prospective transfer students, information about required courses is crucial and misinformation can set a student back a semester or longer. Additionally, for first generation students, access to academic support and guidance on campus is critical as these are rich sources of social capital.

Access to information and the level of academic preparedness were found to be two critical barriers to transfer in a study conducted by Hagedorn et al. (2006). Using TRUCCS data, the authors looked at all community college students with transfer aspirations and found that few make real progress toward meeting that goal. The key

barriers identified by the authors included under-preparedness for college-level math and not knowing or not having access to resources to help identify the courses that count toward transfer. The authors noted that many students begin community college in remedial math and/or English coursework and have to be very intentional and persistent to reach transfer-level courses. College-level math, in particular, is a barrier that many students do not overcome in their quest to transfer. The authors point out that students often take longer than two years to complete transfer requirements, with many taking 9.5 semesters. Part of this may be due to the fact that students do not understand what constitutes as transfer coursework and that transfer is not automatic after completing two years of community college coursework (Hagedorn et al., 2006). A major contributing factor to this is the fact that community college students are often first generation college students and come from lower socioeconomic backgrounds and have entered community college without the necessary guidance for college planning from an under-funded and under-resourced K-12 system. This speaks to the critical role of counseling at the community college level (Hagedorn et al., 2006).

The above studies demonstrate the critical need for information and the challenges faced by students, particularly first generation students and other traditionally under-represented students, who are under-served by institutions that often do not or cannot provide enough resources to support the needs of the student population. Access to information is one of the cornerstones of social capital and college readiness, and first generation college students are more reliant on school-based resources because they are the first in their family to enter the post-secondary educational system (McDonough, 1997; Perna, 2000). However, the existence of such resources as counselors and transfer

centers is not enough. Students must also be aware of the resources, understand that transfer is an option and know when to seek assistance and what to ask (Ornelas & Solórzano, 2004).

Hagedorn and her colleagues have made important contributions with the TRUCCS research, highlighting the broad, systematic patterns of community college attendance by thousands of students in the LACCD system. Without a critical lens, however, this and much of the mainstream scholarly literature on community college transfer lacks a socio-historical context of how race and socioeconomic status shape opportunity (Jain 2009). In order to gain a holistic understanding of the reasons why a student does or does not transfer, additional investigation is needed around why certain student populations did not receive information about transfer, how the campus climate impacts how a student perceives their opportunities, including whether the institution encourages transfer and how transfer is or is not supported (Ornelas & Solórzano, 2004).

Ornelas & Solórzano (2004) conceptualized the importance of a transfer culture in investigating the factors that support the motivation and barriers for Latino/a transfer students. Implementing a case study methodology of one community college, the authors conducted 13 focus groups with 191 students as well as a survey of all focus group participants and conducted in-depth interviews with 24 students. The student information was supplemented by input from administrators, counselors and faculty. The institution was located in an urban, low-income community and primarily served Latino/a students. Though a majority of students aspired to transfer, very few students actually transferred. The school enrolled nearly 20,000 students but transferred only 667 to four-year schools.

Key findings point out that students often gathered information from multiple sources and experienced inconsistent counseling, with some counselors going above and beyond while others did not. Students also found different information depending on what resource they accessed. Barriers to transfer identified in this study include: (1) students balancing multiple roles and responsibilities; (2) students entering community college academically underprepared and under-served by the K-12 system, often resulting in low self-esteem and self-doubt; and (3) students were discouraged when learning about transfer requirements and the number of classes required. Counselors described a lack of institutional support and focus on preparing students for transfer, and interviews with administrators pointed to a gap in understanding of the students' lived experience and a tendency to support vocational training at the expense of academic-oriented curriculum. An over-arching theme was the administration's tendency to invoke a cultural deficit framework, placing blame on the family or community for the students not reaching their goals. Recommendations offered by the authors include that administration must support a transfer culture system with resources (both personnel and technological) and fund learning communities, including such Latino/a-specific focused resources as Puente and other bridge programs including Extended Opportunity Programs and Services (EOPS) and Math, Engineering, Science Achievement (MESA). Counselors need to provide all necessary information regarding transfer to students, and the students themselves need to be proactive seekers of information and support (Ornelas & Solórzano, 2004). This study maps out the institutional barriers and administrative policies and practices that act as barriers to transfer at one community college. However, more work needs to be done to

extend the focus to include the actions and characteristics of students who persist and persevere despite institutional barriers due to resistance and resilience.

Summary

The studies included in this section point to barriers created by structural and organizational factors. Students entering community college with high aspirations are often hampered by under-resourced campuses and inaccurate or conflicting information, a lack of awareness about options available and how to move toward completion and/or transfer in an efficient way. Quantitative research utilizing large data sets provides a context of student-level characteristics associated with transfer. It is also important to consider institutional level characteristics and structural influences that impact the likelihood of transfer. To understand this and the influence of campus climate and culture, drawing on qualitative studies is useful. In reviewing extant research on transfer, it is clear that there are many competing factors that impact the likelihood of transfer, and it is important to examine the experiences of traditionally under-represented students in order to understand the unique factors that both propel and inhibit their educational trajectories.

Understanding Transfer Through a Social Capital Lens

The concept of social capital has been frequently used as a framework for understanding the factors that influence post-secondary decision-making of traditionally under-represented students (see Ceja, 2006; McDonough, 1997; Perna, 2000; Perna, 2006). The complex nature of the transfer process is a significant barrier for California community college students, and understanding and navigating the layers of articulation and transferability of coursework is neither straightforward nor simple. Many students

hoping to transfer are without an awareness of this information during their time in community college, and students' lack of understanding is further compounded by the inadequate and under-funded counseling and transfer preparation assistance provided by community colleges (Hagedorn et al., 2002; Hagedorn et al., 2004).

While many studies on transfer focus on transfer from two-year institutions to four-year institutions in general, there is a subset of literature focusing on the transfer to a selective four-year institution. Understanding the factors that encourage and impede transfer to selective universities is important given that students of color and first generation college students are more likely to begin post-secondary education in a community college, and graduating from a more selective university is associated with higher bachelor's degree completion rate (Alon & Tienda, 2005), higher earnings (Dale & Krueger, 2011), and higher rate of graduate school attendance (Mullen, Goyette, & Soares, 2003). Bensimon and Dowd (2009) investigated the factors that influence whether a student transfers from a community college to an elite four-year institution, situating their study within California and specifically focusing on Latino/a students. Latino/a students, the fastest-growing population of students, are over-represented in the community college system while remaining under-represented in selective universities, contributing to the persistent educational outcome gap. While the majority of research around issues of transfer are large-scale quantitative studies, this qualitative study sought to add the lived experience of students to support understanding of the "transfer choice gap" (Bensimon, Dowd, Alford, & Trapp, 2007). The authors interpreted results from the institutional role of student transfer, thus not perpetuating the deficit framework by focusing on whether students expended "enough" effort. The authors used ethnography

to understand pre-transfer experience of five students from a single community college who were eligible to transfer to a UC campus but had not transferred. The authors wanted to understand how and where students seek information, how they sought advice about their transfer decision, and why they did not pursue transfer to a UC. Within the sample of five students, only one transferred to selective four-year university (not a UC campus). Not one had applied to UC campuses despite the assumption of the California Master Plan that the community college-to-UC track would be followed.

Bensimon and Dowd (2009) focused on students who were transfer-ready, defined as having completed all necessary transfer requirements and utilized a social capital lens, specifically Stanton-Salazar's (2011) concept of the role institutional agents play in shaping the educational opportunities for traditionally underrepresented students. Bensimon and Dowd (2009) also conceptualize the transfer from community college to a four-year school as a "border-crossing" experience. Interviews investigated the following: goals when entered community college; social and academic experience at community college; barriers and successes toward transfer; and attitude toward community college's support or inhibition of transfer. These five students were a small sub-set of a larger sample population that contributed to a larger study.

The authors found that often students were not aware of their options and did not know when to ask questions or who to go to when they had questions. The authors also cite the role of the under-emphasis of transfer as a goal at the community college, where the expectation of transferring was not embedded in their experience. The findings from this study point to the critical importance of students accessing information related to transfer, in particular through institutional representatives. The one student who

successfully transferred had strong connections with a faculty member and a role model in his brother. He was proactive and knew what to ask. The other four students did not have access to or awareness of critical information related to transfer, and were therefore not aware of their options. The study's findings speak to the importance of transfer agents not waiting for uninformed or intimidated students to seek assistance. The authors emphasized that when first generation students establish a trusted relationship with a transfer agent, it is often haphazard, serendipitous, or accidental (Bensimon & Dowd, 2009; Dowd et al., 2006).

Building on previous research, Dowd et al. (2013) looked at how institutional agents provide students with a secure base from a psychological standpoint, using psychological attachment theory. Most studies around the role of institutional agents have been investigated from a sociological standpoint. Using Bowlby's (1983) concept of "emotional and moral support," the authors looked at the role of institutional actors in a student's development from an insecure sense of belonging in the college environment to one of security. The authors chose this approach in response to the frequent characterization of students from traditionally under-represented backgrounds as being culturally deficient and thus experiencing difficulty with persistence and integration in college. Through positive interactions with members of community college administration, students from "low-status" backgrounds who may have been previously negatively impacted by low expectations can experience positive psychological development (Dowd et al., 2013).

In analyzing 10 purposefully sampled life stories of students from low-socioeconomic backgrounds who successfully transferred from community college to a

selective four-year institution, the authors sought to understand the influence of participants' educational experiences and what factors influenced them to attend a community college after high school and then transfer to a four-year institution. Successful transfer was defined as having completed bachelor's degree or gaining admission to graduate school. The study looked at the transfer process and organizational setting in order to understand how college practitioners as institutional agents supported students who are traditionally under-represented, using an action research orientation with the goal of developing a tool for practitioners to use as a guide to better support students. Findings from the study yielded three over-arching themes: lack of early role model and guidance; importance of an institutional agent in the path through community college; and the role of specialized transfer programs as a home base with trusted advisers. Dowd et al. (2013) emphasize the significant influence that institutional agents within a community college environment had on raising aspirations of students and encouraging their development of a scholar identity. Students reported that while they may not have started community college with a clear plan for transfer, an instructor or counselor from a niche program helped the student understand options beyond community college and raised their aspirations. The importance of a specialized transfer program was underscored, including providing space and community with other students with similar goals. This validated their belonging in an academic space and encouraged them to have high aspirations.

The authors noted the particular importance of this type of interaction and support for students who are traditionally under-represented in higher education and/or who are first generation college students, invoking the importance of validation (Rendón, 1994)

and the sense of belonging that institutional representatives can provide. While the students may have not been encouraged early on to pursue post-secondary education from school administrators, parents and family were supportive of pursuing education. The students were characterized as late bloomers who were given a second chance of advancing their education in the community college setting, where they were given the opportunity to reframe their self-concept to see themselves as scholars. This study highlights the key role played by supportive campus representatives, including faculty and counselors, in the success of traditionally under-represented students. More work is needed to show not only the importance of what students gain from the institutional representatives, but what students bring into the educational space and the strengths they have honed in their home communities that have allowed them to persist in a inequitable educational system.

Mmeje's (2012) dissertation work investigated how participation in a specific transfer preparation program built and provided access to forms of social capital, including informational, cultural and relational resources. Using Stanton-Salazar's framework (1997, 2001, 2004) and Bensimon's (2007) concept of transfer agents, Mmeje (2012) investigated how staff and administrators working in the Transfer Academy (T.A.) and services offered through the program supported students with information and resources related to transfer. Utilizing case study methodology, Mmeje (2012) interviewed students in the T.A. and administrators who were instrumental in creating the T.A. The primary goal of study was to better understand how the T.A. helped students create supportive relationships with institutional agents who supported transfer.

Students reported that their involvement with the T.A. was a source of motivation, support and encouragement, helping them persist in the face of obstacles. Students also noted that the T.A. held a different focus on transferring that was not present in the general college environment. A key element of the T.A. is that students have access to a designated counselor, allowing students to build rapport and develop an ongoing relationship. T.A. provided students access to workshops, interaction with alumni, and college tours, as well as a peer group of students with similar goals of transfer. Students reported that having access to counselors simplified the transfer process by breaking it down into manageable steps.

Martin's (2014) dissertation explored the ways that one specific transfer preparation program facilitated the acquisition of traditional forms of social capital while emphasizing, acknowledging and valuing students' community cultural wealth. Specifically, Martin (2014) examined the ways that Latino/a first generation community college students understand and operationalize social capital and community cultural wealth through their participation in the Summer Intensive Transfer Experience (S.I.T.E.) program, which is funded through the Center for Community College Partnerships (CCCP) and was established in the late 1990s in response to the restrictions on admissions as a result of Prop. 209. In her work, Martin (2014) extended previous research around the role of traditional forms of social capital and education attainment for traditionally under-represented students by including Yosso's (2005) framework of community cultural wealth, which is especially important when considering the educational pathway and outcomes of students of color. This study adds the lived student experience to the literature that is predominantly made up of large-scale quantitative

studies. Other studies have looked at the role of sending and receiving institutions, while this study looks at the role in a transition/bridge program.

Martin (2014) analyzed what forms of social capital and community cultural wealth students identified before entering S.I.T.E. and what they recognized and were aware of after participating. Martin used the definition of traditional forms of capital or "college knowledge," including the academic requirements and policies required for students to transfer from a community college to a four-year institution (Martin, 2014). Martin argues that students must be made aware of social capital and community cultural wealth in order to utilize and apply it. Using participatory action research, Martin (2014) conducted a case study of the SITE program, gathering data from 12 participants through interviews, focus groups and a pre-survey questionnaire. Key findings included that before S.I.T.E., many students reported that while their family was supportive of educational aspirations, they experienced inadequate preparation and lack of support and information from their high school regarding post-secondary options. Students felt they did not have the information to make decisions about college, which is why they enrolled in community college. Some students were skeptical of community college because of the negative stigma associated. Others felt community college offered a second chance. Students described the benefits of S.I.T.E., including individualized attention from administration from similar ethnic and socioeconomic backgrounds who were former transfer students. Other key elements of S.I.T.E. included access to a mentor and role model, access to clear, accurate, well-organized and well-articulated information about how to plan for transfer to various schools and various majors, and information on what challenges to expect and how to plan for these (i.e. finances, transferrable units, etc).

Through her research, Martin taught students such traditional social capital skills as navigating information, knowing what to ask and who to ask. Students talked about a hidden curriculum to transfer and noted that students were expected to know when to go to counselor and be familiar with differing transfer requirements and IGETC certification. Participation in S.I.T.E. helped decode these complexities. Students noted the importance of a community and family-like atmosphere of S.I.T.E. where students felt safe asking questions and were surrounded by other students with similar goals. Some students indicated that without S.I.T.E. they felt lost and unaware of transfer option and how to achieve their goals. In terms of community cultural wealth, the S.I.T.E. curriculum emphasized the importance of the qualities that students build in their families and in their home cultures and the ways that these are assets in navigating the transfer process. Through S.I.T.E., students were able to reframe their self-perception to see that they would be successful because of who they are and what they embody and did not need to change to be successful. Martin's (2014) findings are consistent with best practices recommended by other researchers (see Hagedorn et al., 2002; Hagedorn & Cepeda, 2004; Hagedorn et al., 2004; Haberler & Levin, 2014) and emphasize the structural holes existing in the structure of post-secondary education (see Ornelas & Solórzano, 2004; Dowd et al., 2013; Dowd & Bensimon, 2009; Moore et al., 2009).

Ramirez's (2011) dissertation utilized Critical Race Theory and Latina/o Critical Theory (LatCrit) lenses and drew on counter-storytelling to identify the factors that influence Latino/a students from community college to a four-year institution. The study specifically focused on the unique and diverse experiences of Chicano/a students; the influence of prior educational background; and an assessment of institutional support in

the community college setting. Ramirez (2011) conducted a survey and focus groups with students who met the following criteria: self-identified as Hispanic, Latina/o, Chicana/o, Mexican or of Spanish-speaking origin; current student enrolled at American River College; and planned to transfer to a four-year institution. Ramirez (2011) obtained survey data from 85 students, of whom 25 were invited to participate in either individual interviews or focus groups. In total, 22 students participated in focus groups and three participated in individual interviews. Through counter-stories from student participants, findings from this study highlighted the elements of community cultural wealth that supported students' persistence in post-secondary education.

Similarly, Yeung's (2011) dissertation analyzed students' post-secondary educational experience through a community cultural wealth framework. Yeung (2011) drew on Yosso's (2005) concept of community cultural wealth to understand the ways in which immigrant children convert capital developed in the family context and draw on these resources in post-secondary education. Yeung (2011) primarily focused on Yosso's (2005) concept of familial wealth and how children from immigrant families used the skills and strengths they had developed through their family responsibilities to positively influence their post-secondary educational trajectory. Martin (2014), Ramirez (2011) and Yeung (2011) make important contributions to the literature by highlighting the strengths and assets embodied by students of color and the ways in which these qualities can positively influence their post-secondary trajectory.

Summary

This section reviewed previous research on community college transfer through the frameworks of social capital and community cultural wealth. Consistent across

findings of the reviewed studies is the importance of access to information in order for first generation college students to understand all possible post-secondary options. Bensimon and Dowd (2009) and Mmeje (2011) show the critical importance of institutional agents in the educational trajectory of first generation college students, both from an informational and motivational and encouragement perspective. Utilizing a critical lens, Jain (2009) and Ornelas and Solórzano (2004) demonstrate that institutions are not neutral and that structural and organizational factors, such as campus climate and culture, and the practice of tracking students of color toward vocational pathways can have a devastating effect on post-secondary attainment for these students. Ramirez (2011), Yeung (2011) and Martin (2014) demonstrate the power and importance of students' awareness of the community cultural wealth they embody and how their life experience and the adversity they have navigated can propel their academic progress.

Conclusion

This literature review provides a context of the complex reality of community college students navigating the process of transferring to a four-year university. The role and function of the community college is debated, and critiques of its effectiveness are leveled from multiple angles. While the California Master Plan was developed with the intention of supporting students' seamless movement from a community college to a public four-year institution, the reality is that students face an uphill battle due to a moving target of required coursework, poorly articulated policy and not enough administrative resources available to support their needs. The overwhelming majority of students who enter community college systems do not transfer to a four-year university due to a number of complex factors including finances, K-12 preparation, remedial

coursework carousel, over-crowding and difficulty accessing required courses in the community college setting and a more competitive landscape at the four-year level, making it difficult for eligible community college students to gain entry to a four-year school (Moore, et al., 2009; Hagedorn et al., 2002; Hagedorn et al., 2004). This challenging landscape is even more treacherous for first generation college students, who are often academically under-prepared, have graduated from under-resourced high schools and enter post-secondary education with a complex set of personal circumstances further complicated by the fact that their K-12 educational experience was likely deficit oriented. The importance of caring, reliable and available institutional agents such as faculty and counselors as a pivotal factor in educational attainment of first generation students cannot be overstated. My study seeks to build on previous research, using Stanton-Salazar's (1997, 2011) network analytic framework, Yosso's (2005) community cultural wealth and CRT to gain a better understanding of the resources leveraged by first generation community college students who successfully transfer to an elite four-year institution focusing on their strengths, resilience and resistance in navigating a post-secondary education system not designed to promote their success.

CHAPTER III

METHODOLOGY

Restatement of the Purpose

This mixed-methods study sought to understand the influence of institutional based and community based resources in the transfer process for first generation community college students who successfully transfer to a selective four-year university. Review of the literature shows that access to forms of social capital, including information and academic counseling, is critical in the transfer process from community college to a four-year institution. What is less understood is the way that students utilize forms of community cultural wealth (Yosso, 2005) in their navigation of the transfer process. This study utilizes Critical Race Theory to explore the experiences of first generation community college transfer students in order to gain a more complex and holistic understanding of how traditionally under-represented students both experience and respond to the post-secondary education system (Solórzano & Yosso, 2002). In utilizing a CRT framework, this study seeks to "humanize quantitative data and to recognize silenced voices in qualitative data" (Solórzano & Yosso, 2002, p. 38).

In this study, a survey and interview protocol were adapted from the CHOICES Project at UCLA (Allen, Kimura-Walsh & Griffin, 2009), a previously validated instrument, with substantive changes made to accommodate the community cultural wealth focus of the study and research questions. The development of the survey instrument used in this dissertation was also influenced by the dissertation research of Ramirez (2011). The current study builds on previous work to provide insights into the perspectives of first generation community college transfer students' navigation of the transfer process and the resources, both institutionally based and community based, that

supported their successful transfer. This study examines the effectiveness of support from an information standpoint as well as from an encouragement standpoint. The study also investigated the challenges and barriers that students faced and the means they employed to overcome these challenges. The intent of the study was to identify best practices that can be supported and replicated to support first generation college students' transfer from a community college to a selective four-year institution. The current study incorporated interview as a mechanism of storytelling, which is the cornerstone of CRT methodology. Giving voice to one's own experience is especially important within the CRT paradigm because the experience of traditionally under-represented students has been historically over-looked and misunderstood, and "stories provide the necessary context for understanding, feeling, and interpreting," (Ladson-Billings, 1998, p. 13).

Research Design

This dissertation utilized mixed-methods and convergent parallel design, in which quantitative and qualitative data is collected simultaneously. The data from both collection methods was then merged and analyzed to understand a research problem (Creswell, 2012). A convergent parallel design allows the researcher to pull from two separate methods, each which supplements the weakness of the other form. Utilizing both quantitative and qualitative data allowed for a more complete understanding of a research problem and triangulation of data (Creswell, 2012). In conducting a convergent study, the researcher, "gathers both quantitative and qualitative data, analyzes both datasets separately, compares the results from the analysis of both datasets, and makes an interpretation as to whether the results support or contradict each other," (Creswell, 2012, p. 540). In comparing the two datasets directly, the researcher is provided with a

convergence of data sources. Other key elements of convergent parallel design include: both quantitative and qualitative data is collected simultaneously or concurrently from both qualitative and quantitative methods, and the resulting datasets are compared to establish whether the results are similar or different (Creswell, 2012). The strength of a convergent mixed methods research design is that it benefits from the strengths of two forms of data collection and analysis, namely the generalizability of quantitative and the contextual and nuanced detail provided by qualitative data (Groves, Fowler, Couper, Lepkowski, Singer & Tourangau, 2009).

The survey was administered through an online cross-sectional survey with a target sample size of 100 respondents. Cross-sectional survey design, in which the researcher collects data at one point in time, is the most common form of survey research utilized in education and allows the researcher to examine an individual's current beliefs, attitudes and opinions (Creswell, 2012). Following the survey, semi-structured interview data was collected from 15 students who complete the initial survey and expressed interest in participating in a follow-up interview. As survey data was collected, I analyzed the data to get a sense of patterns and trends

The interview protocol included open-ended questions through which "participants can best voice their experiences unconstrained by any perspectives of the researcher or past research findings," (Creswell, 2012, p. 218). Advantages of interview as a data collection method include participants having the ability to describe personal information and the interviewer having more control over the information received because the interviewer can focus on specific questions that relate to the research problem (Creswell, 2012). The focus of the interview was to learn about how events are interpreted. In this

case, the interviews sought to better understand what resources students drew upon to support their navigation of the transfer from community college to a selective four-year institution. Analytic memos were written after each interview session, which provided a preliminary view of emerging themes. The processes of data collection and data analysis are closely related, and in analyzing data throughout the collection process, it allowed modification of questions and influence future interviews (Bogden & Biklen, 2004). In drawing on both qualitative and quantitative methodology, the results provide a more comprehensive understanding of the research questions guiding this study:

1. What role does the community college play in the pursuit of post-secondary education for first generation college students?

2. What community-based and institutionally-based resources do first generation community college students leverage for information to support successful transfer to a selective four-year institution?

3. What community-based and institutionally-based resources facilitate motivation and/or encouragement for first generation community college students in successfully transferring to an elite four-year institution?

4. What, if any, are the perceived barriers encountered by first generation community college students in the process of transferring to a selective four-year institution? What strategies do students employ to overcome these barriers?

Data collection took place in October-December 2015. Additional information about the research setting, participants, survey instrument, interview protocol and data analysis are included in the following sections.

Research Setting

The study took place at UC Berkeley, a public, four-year research university with an enrollment of approximately 36,000 undergraduate and graduate students. UC Berkeley was chosen as the research site because it is a highly selective public institution, and the study is focused on understanding the factors that impact the successful transfer

of first generation college students from a community college to a selective four-year institution. The following statistics are based on UC Berkeley 2015-16 admissions data: of the 5,813 newly admitted freshmen who submitted a Statement of Intent to Register (SIR), 971 (or 16.7%) fell into the category of traditionally underrepresented minorities. Of the 2,475 admitted transfer students who submitted an SIR for Fall 2015 or Spring 2016, 602 (or 24.3%) were traditionally under-represented minorities.

UC Berkeley is one of the most prestigious universities in the world and the flagship university of the UC system. It is particularly relevant to the current study because more than a third of UC Berkeley's students qualify for Pell Grant aid, and 40% of new transfer students are first generation compared to 20% of new freshmen (UC Berkeley, 2016). Statistics around educational outcomes paint a bleak picture for students starting in a community college, as most students who enter community college with transfer aspirations do not transfer (U.S. Department of Education, 2005), and of those who do transfer, few move on to selective four-year institutions (Dowd & Melguizo, 2008). Therefore it is important to understand the resources that supported successful transfer for first generation college students at UC Berkeley.

Since the prohibition of consideration of race in admissions decisions, there has been a significant decrease in diversity at selective colleges and universities across the nation (Brief of American Social Science Researchers, 2013). In California in particular, Prop. 209 has had devastating consequences for students of color accessing prestigious universities within the UC system. At UC Berkeley, in the year after Prop. 209 was passed, there was a 53% decline in enrollment for African American students and a 45% decline in enrollment for Latino and Chicano students compared to the previous year.

Though the percentage of students of color making up the Berkeley student population has modestly recovered in terms of absolute numbers, the diversity of the campus has not reached the level of the pre-Prop. 209 era (Brief of American Social Science Researchers, 2013). The convergence of two trends make the decline of enrollment for African American and Latino/a students at UC Berkeley especially significant— the fact that the population eligible for college admissions is increasingly diverse, and applications at the UC flagship campuses of Berkeley and UCLA have doubled since 1995 (Gándara, 2012). While students from all ethnicities have been admitted at a lower rate to these two campuses, for African American and Latino/a students, the decrease has been between 70-75% compared to 35-40% for Asian and White applicants (Gándara, 2012). As a result, Latino and African American students are more likely to enroll in less selective post-secondary institutions, and research has shown that attending a less selective institution, especially for African American and Latino/a students, has detrimental effects on outcomes including longer time to degree (Bowen & Bok, 1998). Looking at this from the other direction, attending a more selective institution comes with numerous benefits, particularly for Latino and African American students (Grodsky & Kurlaender, 2010), including higher bachelor's degree completion rate (Alon & Tienda, 2005), higher earnings (Dale & Krueger, 2011), and higher rate of graduate school attendance (Mullen et al., 2003). Given the correlation between graduating from a selective institution and leadership opportunities post-graduation, it is critical to investigate the strategies that successfully support a more diverse student body in accessing selective post-secondary institutions (Brief of American Social Science Researchers, 2013). Given the increased importance of admission for community college transfer of first generation, traditionally

under-represented students, understanding what resources and navigational strategies positively impacted their successful transfer to UC Berkeley is critical.

This study focuses on one institution for data collection because the complexity of the transfer process results in a diverse set of circumstances that lead to transfer to a particular institution. For example, if a community college student wants to remain eligible for admission at more than one four-year institution, there will likely be some variety in pre-requisite courses required for admission. Even within a single university system, admission to a certain major at different institutions may require slightly different pre-requisites. For example, the courses required for a prospective transfer student interested in studying Psychology may be slightly different for admission at UCLA as compared to UC Berkeley. To gain admission to UC Berkeley, transfer applicants must meet UC system-wide admissions requirements, complete the general requirements for admission to Berkeley, and complete all required lower-division pre-requisites for their intended major. What often happens is students take more courses than they need in order to make themselves eligible for admissions to a variety of campuses (Moore et al., 2009). UC Berkeley was also chosen because of previously established connections and relationships with student services departments.

Instrumentation

The survey and interview questionnaire were modified from the CHOICES project with consent from Doctor Walter Allen. In the book *Towards a Brighter Tomorrow: College Barriers, Hopes and Plans of Black, Latino/a and Asian American Students in California*, the authors investigated the college choice process and the broader college access landscape for urban Black, Latino/a and Asian American students (Allen et al.,

2009). Through 10 case studies conducted within Los Angeles area high schools, the authors explored how students' backgrounds and educational experiences shaped their post-secondary preparation and aspirations. The CHOICES project utilized a mixed-methods approach and included case study analysis, survey, observation, document review as well as focus groups in order to understand the factors that impacted student experiences. The survey instrument was used to gather demographic data as well as information around the experience of college counseling from the perspective of students, teachers, parents and counselors. Within each high school site, focus groups were conducted for each participant population. For the purpose of this dissertation, the survey instrument, which was previously validated, and interview questions for students were used as a foundation for this study's methodology.

The survey methodology was also informed by Ramirez (2011), and items were modified with the author's permission. Ramirez's (2011) dissertation utilized Critical Race Theory and Latina/o Critical Theory (LatCrit) lenses and drew on counter-storytelling to identify the factors that influence Latino/a students from community college to a four-year institution. The study specifically focused on the unique and diverse experiences of Latino/a students; the influence of prior educational background; and an assessment of institutional support in the community college setting. Ramirez (2011) conducted a survey and focus groups with students who met the following criteria: self-identified as Hispanic, Latina/o, Chicana/o, Mexican or of Spanish- speaking origin; current student enrolled at American River College (ARC); and planned to transfer to a four-year institution. Ramirez (2011) obtained survey data from 85 students, of which 25

were invited to participated in either individual interviews or focus groups. In total, 22 students participated in focus groups and three participated in individual interviews

In reviewing existing research, I reviewed five survey instruments from studies focused on community college transfer, including work by Laanan (1996), Laden (1994), Ramirez (2011), Sinwell (2008) and the instrument designed for the TRUCCS project. A brief description of each of the five survey instruments follows. As noted above, Ramirez (2011) utilized a CRT and LatCrit framework to understand what services/institutional practices contributed to the transfer/persistence of Latino/Chicano students at ARC. The survey measured the following components: attitudes about high school preparation, attitudes about the transfer process at American River College, and demographic information.

Laanan (1996) conducted an exploratory study of academic achievement, involvement, adjustment, and satisfaction of transfer students at UCLA using the 104-item Transfer Students' Questionnaire (TSQ), including likert-scale questions and open-ended questions. The survey's sections included: background characteristics, community college experiences, UCLA experience and open-ended questions. For purposes of the current study, my review focused on the questions included in the community college experiences section. The community college experiences section focused on GPA, honors course experience, and academic and social involvement. The purpose of the study was to understand transfer students' experience adjusting to UCLA and their academic performance after transferring.

The TRUCCS project investigated the factors, both individual and organizational, that promote retention and persistence of urban community college students. TRUCCS

also examines other related patterns and phenomenon including reverse transfer, social integration, remediation, and course-taking patterns. The TRUCCS project is situated within LACCD, as it allows data to be gathered on a diverse student population (i.e. ethnicity, gender, SES, and age). TRUCCS is based on a 47-item questionnaire, and data was collected from Spring 2001 to Fall 2002, combining student responses with transcript data (actual behavior) in order to provide a clear understanding of student outcomes.

Sinwell's (2008) dissertation study, investigated the students' perceptions of the importance of and effectiveness of resources at their community college in preparing them for persistence at a four-year institution. The survey was given to students who had transferred to one four-year institution.

Laden's (1994) study focused on Hispanic students and was conducted at two community colleges, one considered to be a low-transfer school and one a high-transfer school. The survey measured at-risk factors and protective factors and the impact of each on a student's progress toward transfer. At-risk factors included ethnicity, educational level of parents, income level, previous academic record, and English language proficiency. Protective factors were divided into personal factors—positive self-concept, strong locus of control, and desire to improve oneself—and environmental factors—support in home environment, formal and informal sources of support.

Existing quantitative methodology primarily focuses on student-level characteristics including in the analysis were socio-demographic variables (i.e. pre-college academic factors, environmental pull factors, degree expectations, and academic and social experiences), and institutional level factors such as academic and social environment, campus characteristics (i.e. enrollment size, percent of full-time faculty,

and available academic support), and socio-demographics (gender, ethnicity and SES of student population). Elements such as these have been shown by numerous studies to be influential in the process of transfer. What the existing methodologies lack is a critical focus that adequately captures the elements of community cultural wealth (Yosso, 2005).

A limitation of the original CHOICES methodology is that it exclusively focused on traditional forms of social capital. The current study built on the work of Allen et al. (2009) by extending the instrument to the community college setting to understanding students' experiences with the transfer preparation process and by adding questions aimed at capturing elements of community cultural wealth that students leverage to successfully transfer to an elite four-year institution, making an important contribution to the literature that focuses on the often under-valued and over-looked aspects of cultural wealth possessed by students of color. CHOICES takes into account social capital and the student's perception of availability of resources. A limitation to this approach is that it frames students as being solely dependent on institutionally based resources for success. The current study utilized a critical quantitative approach incorporating newly developed survey items aimed at capturing community cultural wealth.

In developing and finalizing the survey questions, a cognitive interviewing process was conducted (Groves et al., 2009) with two UC Berkeley students who are first generation college students and had transferred from a California community college. The cognitive interviewing process involves the respondent, who was a volunteer, completing the survey instrument and thinking aloud about each question and how she arrived at the response she chose (Groves et al., 2009). Because this study involved modifying an existing instrument that was designed to measure the college choice process

for high school students and adapting it to the community college transfer process, it was important to review the questions and obtain feedback as a way of evaluating whether the questions included were appropriate for the transfer preparation process.

Population and Sample

The target population for this study included first generation college students who transferred to UC Berkeley from a California community college within the past five years. Of primary interest for the purposes of this study were students who fit the following demographic characteristics: students who do not hold a non-immigrant visa (i.e. U.S. citizen, permanent resident, AB540, undocumented), students who are first generation college students, and students who are from ethnic/racial backgrounds considered to be a traditionally under-represented minority. Data from students with an F-1, J-1 visa or other non-immigrant visa, transfer students from a community college outside of California, or from another four-year university were not included in the data analysis. While the experiences of non-California community college students and international students are important to understand, the data from these student populations does not directly support the research questions in the current study. The identities of first generation college students were not known, therefore a call for participants was distributed to transfer students in general, and questions within the survey determined whether a student is first generation or not.

Survey Participants

Of the 211 students who started the survey, 137 completed the survey. Of this, 115 were first generation college students who had transferred from a California

community college. "First generation students" were defined as students who reported that both parents had one of the following levels of education:

- grammar school or less
- some high school
- high school graduate (or GED equivalent)
- postsecondary school other than college
- some college
- college degree outside of the U.S.

For students who indicated that one parent had completed any of the above levels of education and reported "unknown" for a second parent, that student was coded as "first generation." Students who indicated any of the following levels of parental education for either parent were coded as "non-first generation":

- college graduate
- some graduate school
- graduate degree

Of the 115 first generation survey participants, 67% self-identified as female (n=77), 32.2% self-identified as male (n=37), and 1 indicated "prefer not to answer." For income level, 1.7% (n=2) of students reported an annual family income of $150,000+, 13.9% (n=16) of students reported an annual income of $70,000-$149,999, 17.4% (n=20) of students reported an annual income of $44,000-$69,999, 23.5% (n=27) of students reported an annual income of $25,000-$43,999, and 31.3% (n=36) of students reported an annual income of $6,000-$24,999, and 5.2% (n=6) reported an annual income of less than $6,000. See Figures 1-4 for a breakdown of demographics of all survey participants.

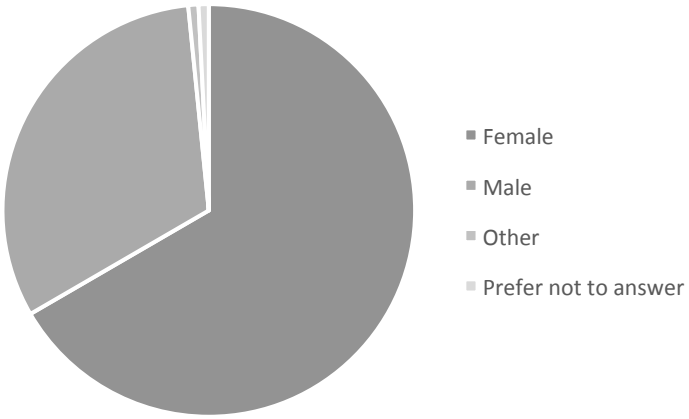

Figure 2. Gender of survey participants.

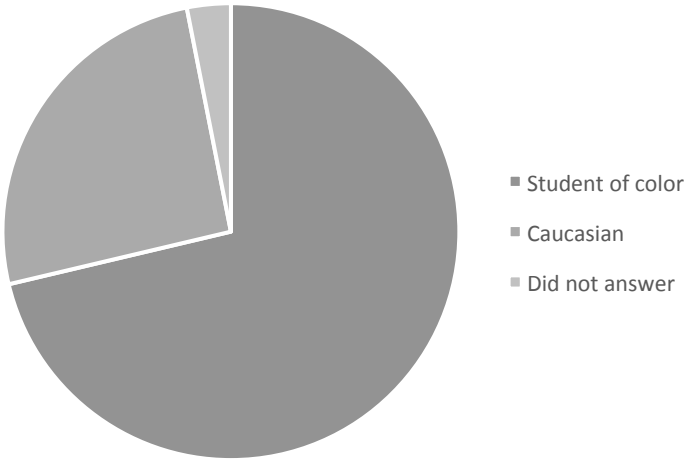

Figure 3. Ethnicity of survey participants.

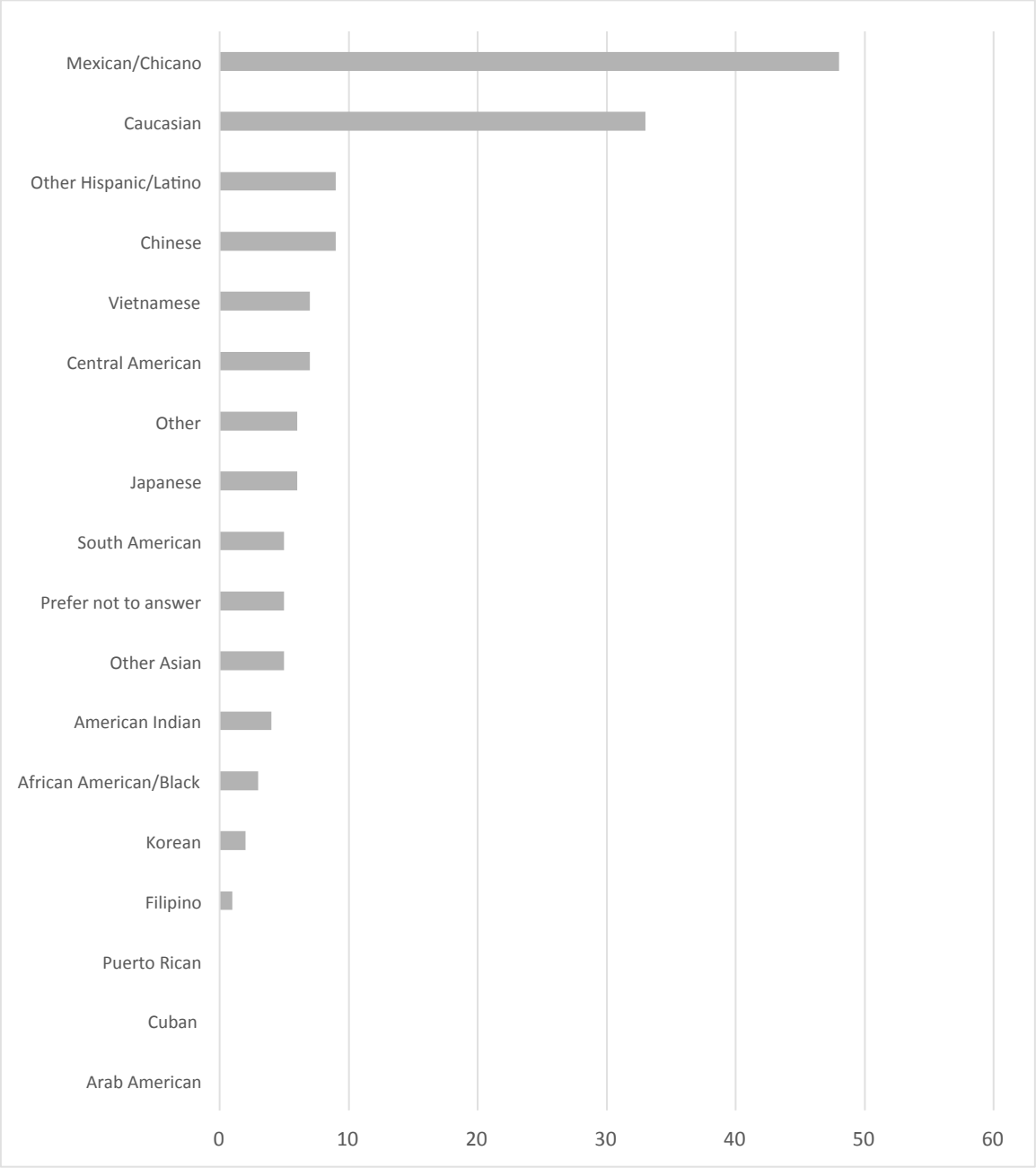

Figure 4. Ethnicity of survey participants. Students self-identified ethnicity and were able to choose more than one option.

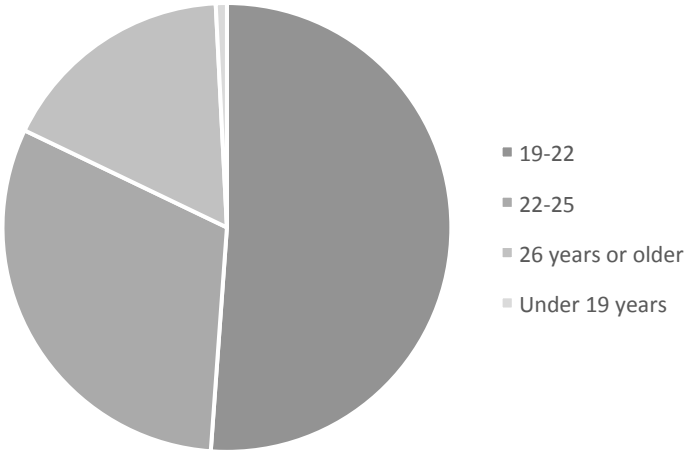

Figure 5. Age of survey participants.

Interview Participants

Of the 115 first generation survey respondents, 25 were invited to participate in a follow-up interview, and 15 students completed an interview. Only students of color, defined as students who selected any ethnicity other than Caucasian, other or declined to respond about their ethnicity on the survey, were invited to participate in follow-up interviews due to the study's guiding paradigm of Critical Race Theory and Yosso's (2008) community cultural wealth framework, which both emphasize the centrality of race in shaping student's educational experiences. A detailed description of methodology including data collection and analysis procedures is included in the following sections.

Table 1
Interview participant demographics

	Gender	Age	Self-Identified Race/Ethnicity	Parent's highest level of education (mother/father)	Number of semesters at CC (fall/spring)	Major at UC Berkeley
Edgar	M	23	Latino	High school graduate or GED/grammar school or less	6	Political Science & Ethnic Studies
Sonya	F	20	Mexican	Some college/Some high school	4	Political Science
Roberto	M	23	Hispanic	College degree outside U.S./College degree outside U.S.	6	Physics
Helena	F	29	Latina	Some high school/High school graduate or GED	7	Sociology
Leanora	F	22	Hispanic	Grammar school or less/grammar school or less	8	Applied Mathematics
Hera	F	21	African American	Some high school/Some high school	4	Political Economy
Lee	F	21	Vietnamese	Some high school/High school graduate or GED	4	Integrative Biology
Penny	F	22	Chinese	High school graduate or GED/Some high school	5	Electrical Engineering & Computer Science
Julian	M	23	Latino	Grammar school or less/Some college	7	English

May	F	21	Chinese American	High school graduate or GED/ High school graduate or GED	4	Economics
Mateo	M	21	Mexican American	Grammar school or less/Grammar school or less	6	Political Science
David	M	21	Mexican	High school graduate or GED/High school graduate or GED	4	Sociology
Victoria	F	22	Mexican American		6	Legal Studies
Oscar	M	24	Latino	Grammar school or less/Grammar school or less	6	Sociology
Gustavo	M	22	Mexican	Grammar school or less/Grammar school or less	6	Media Studies

Procedure for Data Collection

USF's IRBHS process was completed in summer 2015 (see Appendix D for documentation), and approval was obtained from UC Berkeley's Office for Protection of Human Subjects (OPHS) at UC Berkeley in November 2015 (see Appendix E). Berkeley's OPHS initially granted permission to collect data under USF's IRB approval as long as the researcher acted like an outsider and relied on departmental contacts to assist me in contacting students. Once full approval was granted by Berkeley's OPHS, the researcher then used her position as a staff member on campus to contact students directly.

UC Berkeley students who transferred from a California community college were invited to complete the online survey during the months of October-December 2015. A call for participants was sent through various student-facing offices throughout UC Berkeley in late October, including the Centers for Educational Equity and Excellence which houses programs including EOP and the Transfer Student Center, Bridges Multicultural Resource Center, departmental offices for undergraduate major advising, and college advising, including Letters and Science. I asked staff representatives in these departments to include information about the study in email list serves and student newsletters. The researcher obtained permission to recruit participants at transfer student workshops through the Transfer Center as well as through the Education 198 course, which is a class specifically designed to help transfer students transition to UC Berkeley. I made in-person presentations about my research in three sections of Education 198, during which I provided fliers and instructors sent a follow-up email to students with the online link to the survey. An instructor of Education 198 also disseminated information about my study to the 320 students enrolled in 14 sections of Education 198 via the course website. The researcher also utilized the support of UC Berkeley students who transferred from a California community college to assist with distributing information about my survey through announcements at student group meetings, emails to students and postings on student-run social media sites created specifically for transfer students and students of color.

Information was posted to social media sites for student groups, focusing on transfer-centered groups, as well as student groups with a large population of traditionally under-represented students. Participants with whom the researcher met as an academic

adviser in UC Berkeley's College of Letters and Science were also recruited. With the help of my colleagues in the Office of Undergraduate Advising, transfer students who met with an adviser during November and December 2015 were given a flier with information about the study and direction on how to access the survey. See Appendix G for language used to recruit participants. Whether students received information about the survey from a flier, email or in-person presentation, they were provided the URL for the online survey, and had the option of completing the survey on their smartphones, computers, or tablets. The survey took approximately 10 minutes to complete. A paper version of the survey was also available for students to complete when participants were recruited at in-person events such as workshops or classes.

The recruitment goal for participant interviews was 20-25 diverse participants. An invitation to schedule an interview was extended to 25 students. Due to scheduling issues and participant availability, 15 interviews were completed. Only students of color, defined as students who selected any ethnicity other than Caucasian, other or who declined to respond about their ethnicity on the survey, were invited to participate in follow-up interviews due to the study's guiding paradigm of Critical Race Theory and Yosso's (2008) community cultural wealth framework, which both emphasize the centrality of race in shaping student's educational experiences. Thirteen of the 15 interviews were held in a conference room in my office in the College of Letters and Science at UC Berkeley. Two interviews were conducted via phone due to scheduling constraints. The interviews took place in November and December of 2015. The interview was semi-structured to allow for a more flexibility and fluidity as compared to a structured interview (Lewis-Beck, Bryman, & Liao, 2004). A semi-structured

interview is organized around topics or themes and to allow for flexibility in how particular topics are covered during an interview and to allow for flexibility with regards to follow up within each individual interview. This allows each interview to be shaped by each participant's unique experience and allows for unexpected themes to emerge (Lewis-Beck, Bryman, & Liao, 2004). Most questions were open-ended, with the goal of building an understanding of the student's experience in navigating the transfer process from a community college to UC Berkeley (see Appendix B for student interview questions). Each of the interview participants will receive $20 as a "thank you" and compensation for their time.

Survey Protocol

Collecting data through a survey allows for an easier process of data analysis and comparison. Online survey as a methodology has gained popularity due to ease of access and efficiency of analyzing data once collected. This modality of data collection is especially popular when the participant population is highly literate and has access to a computer and the internet (Fowler, 2014).

The survey consisted of 42 questions (Appendix A). The majority of the questions were closed-ended. The open-ended questions included gathered additional information about the participants' experience transferring from a community college to UC Berkeley. Students were asked to provide their contact information if they were interested in participating in a follow-up interview.

The questions within the survey identified aspects of the student experience and resources commonly accessed during the transfer preparation process, including school-based, community based, and institutionally based resources. The survey measured

elements of traditional social capital, including: student perceived access to resources, student utilization of resources, and elements of Yosso's (2005) community cultural wealth model, with particular interest paid to navigational capital, resistant capital, and social capital. First generation college students were identified based on responses to the questions pertaining to parental education.

Interview Protocol

The interview collected data about the participants' experience in the transfer process, including what resources participants relied on for information and encouragement through the process of transferring from a California community college to UC Berkeley. The interview protocol (see Appendix B) includes a list of semi-structured questions with the intent to start a conversation about the participant's experience transferring from a California community college to a four-year institution (Creswell, 2012).

Interviews lasted one hour or less, as recommended by Weiss (1994). Pseudonyms are used for each participant and all community colleges have been assigned a pseudonym as well. During the course of the interview, participants were reminded that all information shared during the interview will be kept confidential (Bogden & Biklen, 2004), and that the interview was being voice recorded but would only be accessible to the researcher and the professional transcriber. Participants were also informed that they would receive small cash payment for their time at the end of the interview.

Data Analysis

This section describes the data analysis procedures used for the study, which draws on both qualitative and quantitative data. Qualitative analysis is intentionally centered in the presentation of my findings, included in Chapter IV, in order to address elements of community cultural wealth that previous survey instruments have not adequately captured. To analyze quantitative data, raw student data was exported from Qualtrics and imported into SPSS for analysis of descriptive statistics including frequencies. The presentation of descriptive analysis, based on a critical quantitative survey design, triangulates my qualitative findings. The section below includes a detailed description of the coding and analysis approach for qualitative data used in this study.

Interview data was transcribed into text and saved into a text database (Creswell, 2012). A professional transcriber was hired to produce transcripts of each interview, and the researcher listened to all of the recorded interviews. Data was analyzed line-by-line (Creswell, 2012), utilizing a theoretical and interpretive lens using the guiding theoretical framework of Stanton-Salazar's (1997) social networks theory and Yosso's (2005) community cultural wealth to analyze and interpret the data. A detailed description of these frameworks is provided in Chapter 1 and Chapter 2.

The coding and analysis process conducted was modeled after Jayakumar et al., (2013) in order to accurately identify meaning and themes that emerged from the interviews. In following Jayakumar et al., (2013), the original interview transcripts, which had been transcribed verbatim, were converted into tables, which provided the organizational framework of an index. An example of an interview transcript chart has been included as **Table 2**. Each interview participant was assigned a number based on

the order in which the interviews were conducted. In each interview index, the verbatim transcript of each speaker is included in the box labeled "Transcript." Each response from a speaker (i.e. either the interviewer or the participant) was assigned a line number. The "Code Summary" column was used as an indexing tool. After reviewing each statement, the speaker's response was summarized. The summary appears in the "Code Summary" box. This summary was meant to both capture the essence of each response and to also provide me a way to briefly evaluate the responses that were being provided.

Table 2
Excerpt from interview transcript: Interview 14: Coded by CT (2/14/16)

Line #	Speaker	Transcript	Code Summary
011	CT	When and how did you come to the realization that you wanted to go to college?	
012	I14	Okay. So, I know that... And I went to kind of like a low-achieving high school in Los Angeles, and I knew we had like a career center and... It was kind of weird, because I remember I would always excel in classes, but I didn't really have a really solid idea or a plan of what I was gonna do next after high school, and I know that in my parents... Yeah, my parents always emphasized that they didn't want me to end up in the low-wage labor economy, and so I just really had no real plans. And it wasn't until I graduated from high school that I was just kind of like, "Oh, well what's next?" Right? And so the... I hadn't applied to four-year universities right away, and so the most kind of logical next step was to go to community college, because I knew that the career counselors or teachers, they would say, "If you don't go to a four-year then you always kind of have a community college option, which is a two-year," so I was kind of familiar with the process, but I didn't really have a plan.	**Always did well in high school but didn't know what I wanted to do after. Attended low-achieving high school. Didn't receive post-secondary planning support at HS. My parents wanted me to do "more." Didn't have concrete plan for after high school. Went to community college by default.**
013	CT	Okay. So college preparation wasn't something that was part of your high school experience.	
014	I14	Not my particular experience. I knew that there were kids that were doing it, but I didn't do it.	**Some students in my HS were preparing for**

			college but I was not.
015	**CT**	Okay. Okay. Kids within your high school?	
018	**I14**	Yeah, yeah, yeah, some kids were.	**Some kids in my high school were college bound.**
019	**CT**	Okay. One sec. Do you think others have always or always expected you to go to college or not go to college or kind of what was the expectation for you from family, teachers, counselors, your peers?	
020	**I14**	Yeah. So, I know that for sure my parents kind of expected me to graduate high school, right? And I think it just kinda goes back to them not having gone to college or not knowing other folks that had gone off to college, so they just kind of knew like, "Oh, we want you to have a better job than us, so you can go to school and get a training for something," so they kind of expected me to go into post-high school or higher education. My peers, not really. They were just kind of like apathetic at the time when it came to school, so I didn't have peer-to-peer pressure to go on to school. And then from teachers and counselors, I think it was an idea they were kind of enforcing throughout 9th and 10th grade, but then once it was like junior or senior year, if you weren't engaged, which I wasn't at the time, they kind of stopped engaging you, and so that just kind of went away, from teachers and counselors.	**My parents expected me to graduate high school and get better job than them. My peers weren't engaged in their education. My teachers stopped engaging me about college because I wasn't engaged.**
021	**CT**	Interesting. I'll ask more about that kind of process with other questions. Okay. And I'm guessing, and maybe things think about this for other questions I'm guessing at a point you did engage, or you did become more engaged with wanting to go on.	
022	**I14**	I'm sorry, were you not finished?	**n/a**
023	**CT**	No, go ahead. Yeah, so I'm just thinking, so you said at that time you weren't engaged, was there a point where you did become... Or I guess, what happened later?	
024	**I14**	Yeah yeah. Yeah. So, it was just kind of after graduation, and I knew that I probably didn't wanna kind of let my parents down by just stopping there, and especially because just with a high school diploma I don't think there was much options that I had, so I knew that I wanted to go to junior college, and so once I was there I still wasn't sure what I wanted to do, and I remember that, as a first-semester student you don't have a lot of priority with classes, so I ended up taking some remedial classes or some classes that	**Started community college without specific direction and in remedial classes because didn't have priority registration. Met faculty who revolutionzed how I thought of education.**

		really weren't teaching me anything new. Yeah, but then I could get into this later, it was just kind of I had... I took some classes with a specific professor and then that just kind of revolutionized the way that I thought about higher-education and... You know, I just started meeting more people, and then that's when I realized that, I had the potential to go on and do better things, and so that's when I kind of became more involved in community college, and started working towards transferring to a four-year.	
025	**CT**	Okay, awesome. Yeah, school definitely, it can come up... So you said earlier... My next question was, were you admitted into any four-year colleges out of high school, but it sounds like you didn't apply.	
026	**I14**	No.	**I didn't apply to any 4-year schools during high school.**
027	**CT**	Okay. Okay. Who would you say has had a significant influence on your educational aspiration? Family, peers, teachers, you kind of mentioned some folks from your community college...	
028	**I14**	Yeah, yeah. Okay, so definitely my parents first of all, they were always... Even in high school when I was becoming apathetic a little bit, they would always be persistent and always kind of be pushing me to, I have to go to school, I have to go to school, so that was always for sure... It was them. My dad for sure, one thing that I always think back... It was like, once I became more critical about my history and the way that my behavior and my motivation, I remember that my dad was always the one who always take me to the library, and that's where I became an avid reader. Even if I wasn't engaged in school, I was always reading, and that's something that my dad fostered in me, 'cause I love reading, so he was definitely key. In school just kind of... In high school the different teachers, but I wouldn't say that to the point where I wanted to go to college.	**My parents pushed me to complete high school when I became apathetic. Social capital from dad – instilled love of reading.**
029	**I14**	It was until I was in junior college... So I transferred from (College), but I started at (College), and it's in the same district, but it's a different community college. And there I took courses where a professor... I could tell you his name, you could probably even contact him and he'll still have greater insight, but (FACULTY), he taught English, and I took his remedial... No I didn't take his remedial English, I took him for college-level English, and he had us read these really critical analysis, regarding society and the standpoint of Latinos, and he really employed that kind of, "Analyze	**Started at one CC and transferred. Met professor who challenged me to be critical of my position in society and education.**

		yourself," right? Like, "Why are you in this certain position?" Right? And so that just kind of opened my eyes, and after that I remembered he introduced me to some folks over at UCLA, they were doing work for Triple CP, which was the community college and four university partnership, and yeah...	

From the information included in the "Code Summary" columns, a detailed domain analysis of the responses that were common across the 15 individual interviews was conducted. Because the "Code Summary" of each participant's responses served as the foundation for the domain analysis, careful attention was paid in the process of paraphrasing each response. The code summaries for each response were reviewed several times in order to check to make sure that nuances from the responses were captured in the code summary.

Figure 6 includes an example of how the summaries were constructed.

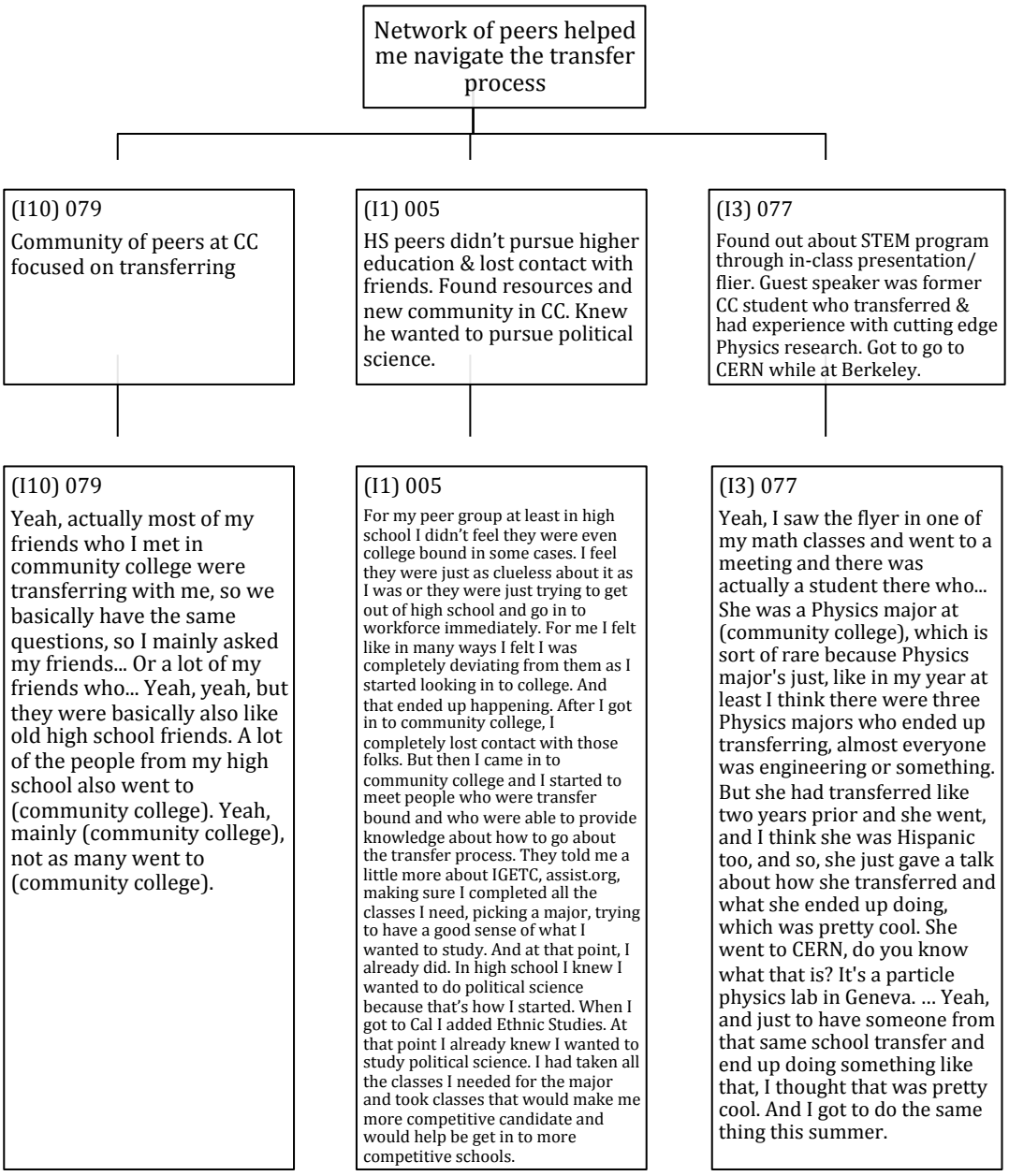

Figure 6. Example Code Summaries.

In order to organize the data, the code summaries were reviewed, and theoretical domains were identified that captured the essence of the responses provided. The domains were developed from an examination of the responses provided by the students. The code summaries and theoretical domains identified were reviewed by the interview participants as a means of triangulating the data and ensuring that the themes appropriately captured the participants' responses. This process of member checking also assisted in reviewing the assignment of particular code summaries to theoretical domains and to ensure that statements had been accurately categorized and grouped by domain. **Table 3** introduces the domains used to organize the interview data. The over-arching domains included: (1) formation of educational aspirations; (2) resources for information about transfer; (3) resources for motivation and encouragement: (4) barriers to transfer; (5) resistance and resilience in overcoming barriers. These domains are consistent with previous research (see Dowd et al., 2013; Dowd & Bensimon, 2009; Hagedorn et al., 2002; Hagedorn & Cepeda, 2004; Hagedorn et al., 2004; Haberler & Levin, 2014; Moore et al., 2009; Ornelas & Solórzano, 2004).

Table 3
Range of responses

Domain 1: Formation of educational aspirations	
1.1	Role of community college in students' post-secondary education
1.1.1	Benefits of community college
1.1.2	Community college is a second chance
1.1.3	Community college is less expensive than a four-year institution
1.1.4	I went to community college to transfer to a better school
1.1.5	I benefitted from a smaller learning community at community college
1.1.6	Negative stigma of community college
1.2	Development of higher education aspirations
1.2.1	My family has always supported me in my educational journey
1.2.2	My high school prepared me to go to college
1.2.3	I was not prepared for post-secondary education
1.2.4	My educational aspirations have evolved over time
Domain 2: Resources for information about transfer	
2.1	Community college campus resources
2.1.1	Counselor

2.1.2	Specialized program (i.e. EOPS, honors program)
2.1.2.1	Structured advising
2.1.2.2	Priority registration
2.1.2.3	Personalized counseling
2.1.2.4	Connected student with outside opportunities (i.e. scholarships, 4-year campus visits)
2.1.3	Faculty
2.3	Older family member (i.e. sibling, cousin)
2.4	Peer network
2.5	Individual research
Domain 3: Resources for motivation and encouragement	
3.1	Community college-based resources
3.1.1	Counselor/Faculty encouraged us to beat the odds and aim higher
3.1.2	Specialized programs (i.e. EOPS, honors) connected me to outside opportunities that helped me shape my future goals
3.2	Network of peers helped me navigate the transfer process
3.2.1	I found a network of allies in other undocumented students
3.2.2	Seeing other students transfer from my CC helped me believe that I could
3.3	I want to continue my education to help my family
3.3.1	Education is my family's way out of poverty
3.3.2	I want to pave the way for my younger family members
3.4	I want to make an impact on the broader community
3.4.1	I want to work in education so I can help students like me
3.4.2	I want to fix the system so others don't have to go through what I went through as an undocumented student
Domain: Barriers to transfer	
4.1	Institutional, school-based
4.1.1	Complex transfer process
4.1.2	Access to resources
4.1.3	I found out late or didn't know about resources at my CC to help me transfer
4.1.4	Difficult to find reliable sources of information
4.2	Familial
4.2.1	I attended community college because I could not afford to go to a four-year school
4.2.2	As a first generation student I had to navigate the post-secondary system on my own
4.2.3	I was not encouraged to go to college by my family
4.3	Societal: My educational trajectory has been shaped by my race/ethnicity
4.3.1	Being undocumented has been a significant barrier in my path toward and through higher education
Domain 5: Resistance and resilience in overcoming barriers.	
5.1	I am motivated to prove people wrong
5.1.1	I want to show people that CC students can transfer and succeed
5.1.2	Because of the discrimination I've experienced, I want to succeed
5.1.3	As a student of color, it is important for me to continue my education
5.2	I am persistent and resilient, which has helped me overcome challenges
5.2.1	I did my own research to find opportunities and resources
5.2.2	I was proactive in seeking assistance, resources, and applying for opportunities

Please see Appendix F for additional detail regarding the grouping of individual survey and interview questions within constructs and the relationship to each research question.

Researcher Bias and Positionality

It is critical to recognize the ways the researcher's identity may impact the lens of the study, the perception of participants and the analysis of data. As discussed by Fontana & Frey (2005), the researcher is a contextually, historically and politically located person, with feelings and biases. The experiences of researchers are impossibly intertwined with the research process. Having a clear awareness of our individual position, privileges and biases is critical in understanding, "the ways in which we go about creating a text," (Fontana & Frey, 2005, p. 697).

I embarked on this research with an awareness of the numerous forms of privilege I possess. As a White person and a member of the middle-class, I hold privilege from a race and economic standpoint. I am also privileged in my education, as I hold both a bachelor's and master's degree and am in the process of earning a doctoral degree. I am committed to issues of college access and equity in higher education and have integrated work on these issues both through my professional career as an academic advisor now at UC Berkeley, and as a volunteer for various non-profit organizations focused on college access for first generation students. As an Academic Adviser, my work with undergraduates is infused with a commitment to equity and social justice. I have learned from my daily interactions with students about the different challenges and barriers faced by first generation college students, and particularly by community college transfer students. I have also witnessed first-hand the strength, resistance and resilience that first generation college students and students of color utilize to successfully navigate their post-secondary journey. I embarked on this study with the hope of gaining a deeper understanding of the experiences of first generation community college transfer students

in order to highlight the strength of these students and where and how we as educators need to invest more to support this student population.

As a gay woman, I have experienced how systematic oppression can alter the availability of opportunities. I do not, however, equate my lived experience as a woman and as a gay person to the lived experience of first generation college students, people of color, or those from a low-socioeconomic background. I believe, however, that my experience with marginalization based on my identities has directly influenced my empathy toward others who face various forms of oppression. Because of this, I utilized LatCrit because of its intersectional focus, "our own experiences with the multiplicity of racialized oppression and our responses to and resistance against such oppressions from our positions of multiple marginality inform and shape our research," (Solórzano & Yosso, 2002, p. 39).

In my role as a College Adviser at UC Berkeley, I am a part of the campus community. Involving UC Berkeley students allows me to engage in data collection that does not just take from the student but can inform practices and policies and a greater understanding of these students' lived experiences, giving back to the student community as well. Additionally, because of my position as an insider at UC Berkeley, I work with community college transfer students every day, which affords me with additional insight into their successes, challenges and the paths they have navigated to get to Berkeley. Because of my connection with UC Berkeley, there may be a higher level of trust with students who participate in interviews, which is an important factor for qualitative data collection (Fontana & Frey, 2005).

Ethical Considerations

The rights and safety of the participants of this study are of the utmost importance. Approval was obtained from the Institutional Review Board for the Protection of Human Subjects (IRBPHS) at the University of San Francisco and Office for Protection of Human Subjects (OPHS) at UC Berkeley. An Informed Consent Form was shared with participants prior to both the survey and the interview phases of this study (Creswell, 2012). The current study involved minimal risk for participants, and the study employed voluntary participation. Participants were informed that they could terminate their involvement with the study at any point. Participants who completed an interview were given $20 as compensation for their time. Participants who completed the survey had the option of entering a drawing for a $100 Target gift card.

CHAPTER IV

FINDINGS

Introduction

In this chapter findings and analysis are presented based on both qualitative and quantitative data to answer the four central research questions of this dissertation. First, a summary of the study is provided, including an overview of methodology and participants. Lastly, the findings and analysis of data is presented, organized by research question.

Qualitative data is intentionally centralized in the reporting of this study's findings with support from the statistical analyses drawn from the quantitative student survey data. Qualitative analysis included line-by-line coding and analysis, and quantitative data was analyzed using SPSS. Descriptive statistics, including frequencies, are reported in this section to provide context for the qualitative findings. Though the quantitative data is used secondarily in the analysis of the findings, the adaptation and modification of the CHOICES survey to apply to the community college transfer preparation process is significant because it adds to the literature as it provides a new tool for understanding the role of traditional social capital in community college transfer. The survey used for the current study included newly developed questions aimed at capturing elements of community cultural wealth, which is most commonly captured by qualitative methodology in the majority of extant literature. The survey items in this study serve as a starting point for the development of critical quantitative methodology to capture community cultural wealth. The critical quantitative methodology better captures resilience and resources rooted in students' families and home communities than the

traditionally asked questions. Demographic information was collected for all participants, and demographic and biographical information is included for each individual who participated in an interview. A detailed overview of survey and interview participants is included in Chapter III. This chapter includes overarching themes organized into five domains: formation of educational aspirations, resources for information about transfer, resources for motivation and encouragement, barriers to transfer, and resistance and resilience in overcoming barriers.

Findings and Analysis

The following sections include an overview of the findings and analysis of the data from the current study. Results and analysis are organized by research question with qualitative and quantitative data reported followed by an analysis of the elements of community cultural wealth demonstrated by the data. Qualitative data guides the reporting of the findings of this study with support from the statistical analyses from the quantitative student survey data. In the following sections the terms "participants" or "students" refer to interview participants. To signal the reporting of survey data, the term survey participants is used. The following section provides an overview of formal and informal resources that impact post-secondary planning for first generation college students who participated in this study. For the purposes of this study, formal resources include institutionally based, in-person resources housed at a community college campus. Informal resources include resources not based within the student's community college. These encompass a student's family, peers and mentors from the broader community as well as the student's own online research. The findings are grouped by research question and reported according to the overarching themes yielded from data analysis.

Research Question 1

What role does the community college play in the pursuit of post-secondary education for first generation college students?

Educational Aspirations

The formation of educational aspirations are integrally connected to students' post-secondary trajectory. For the majority of participants, attending college was expected by their parents, however, the path to community college for each student was unique with reasons ranging from not being accepted to any four-year schools out of high school, not having applied to any four-year schools, not having been eligible for four-year schools due to lack of support and direction from high school counselors, or being accepted to a four-year school but not able to attend due to financial circumstances or family responsibilities. Four of the 15 participants attended high schools described by students to include elements of a strong college-going culture, where college preparation was built into the curriculum and school administrators intentionally supported students in preparing for and exploring post-secondary options. For most other students, while aspirational capital from their family was high in terms of expecting the student to continue their education after high school, infrastructures did not exist in either the home or school environment to gain preparatory information in support of exploring post-secondary options besides community college. For seven students who attended a high school lacking infrastructure that emphasized exploration of post-secondary options or who personally did not have access to these supports, the absence of a teacher or counselor who intentionally took extra time to facilitate connections that were otherwise absent from the immediate school environment effectively eliminated a four-year

university as an option immediately following high school. The absence of information or intervention played a significant role in the educational pathway of Helena. As a high school sophomore, she decided she wanted to drop her college prep courses. She made this decision alone, and it was implemented by a high school counselor without consultation with her parent. Helena shared that:

> I realize now I could've skipped some stuff in community college having those classes in high school. 'Cause I just was, I didn't wanna do them anymore, it's like 'Yeah, I'm not going to college, who cares?' And I just dropped them, and I'm still kinda confused how that process works, but (my high school counselor) just let me drop them all. And I went into all just basic things that weren't gonna prepare me anyway for college. They never discussed it with my parents.

For Oscar, while his parents wanted him to continue education beyond high school, he did not have access to support at home or school to help him evaluate his options or plan for college during high school. He shared that:

> it wasn't until I graduated from high school that I was just kind of like, 'Oh, well what's next? Right?' ... I hadn't applied to four-year universities right away, and so the most kind of logical next step was to go to community college, because I knew that the career counselors or teachers, they would say, 'If you don't go to a four-year then you always kind of have a community college option, which is a two-year,' so I was kind of familiar with the process, but I didn't really have a plan.

In Edgar's high school experience, applying to a four-year school was not discussed with him as an option, even though he worked in his high school's counseling office:

> the thing was that I wasn't too exposed to the process of applying to a four-year institution, even my high school counselors weren't providing that as an option. Especially in my senior year I was just being pushed into community college in certain ways because they never talked about the possibility of attending a four-year institution. And I was in some support programs, but then at that point I felt like it was already too late. … And it's funny because I worked in the guidance counselors office (in high school) but I never actually talked to them a lot about college even though I was constantly interacting with them just because at that point I wasn't thinking about transferring to a four-year.

David, who attended a high school where students were intentionally prepared to go to college with an emphasis on four-year schools, shared the negative reaction he encountered within his high school community when he decided, in large part because of his family's financial situation, to go to community college:

> I started doing research on the idea of going to a community college, and I saw that there were lots of benefits as well as some disadvantages that I could look over. And after expressing my desire to go to a community college to peers and teachers and counselors, they weren't really receptive to that idea. They tried to persuade me and other students who were looking at going to a community college by telling us how it's almost impossible to transfer, how classes are impacted, and how I could do better than that. And I've actually had students confront me telling me that I shouldn't go to a community college, and I've even heard teachers that I've had saying that community colleges aren't good.

For Mateo, once he decided that he was no longer going to pursue the military academy pathway, he wanted to continue his education. Because he had not applied to any four-year institutions, community college was his only option for continuing his education. Having prepared for a military academy throughout high school, Mateo was unsure about his future plans, and attending community college allowed him the time to figure out where he wanted to go. He described being steered away from choosing community college:

> Our college counselor didn't really advise her students to enroll in community colleges. She felt that you ran a huge risk if you enrolled there, life just kinda happens and you may not ever transfer, that's the way she personally felt, although I didn't necessarily agree with that, 'cause I relied on the example of my brother and my sister that they both went to community colleges.

Community College Impact

Each student arrived at community college from a different path and set of circumstances. Their experiences and account of the role of the community college in their educational pathway were often shaped by factors that contributed to their entry into

the community college system after high school. Five of the 15 interview participants talked about grappling with the negative stigma associated with community college. These five students either attended community college because they were not admitted to a four-year school out of high school or because of their family's financial situation. For students who enrolled in community college after high school for other reasons, the negative stigma was not as salient of a theme in their experience.

May shared her experience with regards to the reactions of her high school peers and community when she told them she was going to enroll in a community college after high school. She had applied to four-year schools but did not get accepted to any out of high school. Attending a high school with a strong college-going culture and the expectation of attending a four-year institution after high school graduation, May experienced the following:

> When I told everyone that I went to community college, it was kinda really awkward because they'd be like, 'Oh.' There was still that stigma, but eventually I got over it … I think it was just because most of my other peers and other classmates and stuff like that in high school were going to four year college. So then when people were like, 'Oh yeah, so where are you going to college?' And then they'd be like, 'Oh yeah, I'm going to LA, and I'm going to San Diego.' And then I'd be like, 'Oh yeah, I'm going to West City College[1],' and they'd be like, 'Oh.' ... Yeah, so that was their literal reaction. They'd be like, 'Oh.'

Leanora struggled with shame around not being able to attend a four-year school right out of high school. She was accepted to Berkeley but could not attend due to the fact that she is undocumented and could not access financial aid at the time. She had been in AP and honors classes in high school and struggled with disappointment of not being able to attend the same type of post-secondary institutions as her peers right away:

I felt a lot of shame for that like, 'I was in the same classes as you were, same test

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[1] Pseudonym

> scores, same grades and I didn't get this opportunity and you did.' And so that really ... I felt really ashamed for a long time. … I wish someone had told me when I was in high school, 'It's okay. It doesn't make you less smart, or less intelligent, or less driven, or less whatever to go to a community college. If you have to do that it's gonna be easier 'cause it's less money, if at all.'

And while the negative stigma was something that several students struggled with when enrolling in community college after high school, the majority of students shared numerous positive benefits they gained from attending community college before transferring to a four-year school. For many, attending a community college was a sort of second chance. For Roberto, community college was his opportunity to gain access to a four-year school after being kicked out of his original high school and transferring to an alternative high school where college was not expected for students. He chose to leave that setting and begin community college without completing his high school diploma, knowing that if he wanted to gain access to expanded career opportunities and additional educational opportunities, he would have to go through the community college system to get there. He shared:

> And once I was in college I knew that was basically my last chance, 'cause if you mess up in high school you have a second chance, you can go to community college ... at least students here in California are pretty lucky to have that, because you can transfer to a really good school like Berkeley or wherever. And, I mean, I knew that was my last chance and I couldn't really mess up again, so I was motivated enough to at least, say, keep going to school.

Another benefit of community college cited by several interview participants is that attending community college allowed them time to explore, try out different academic interests at a lower tuition rate and with what seemed to feel like less risk. Both Helena and Hera benefitted from this aspect of community college as they did not feel "ready" for a four-year college right after high school. Having access to a smaller learning community, the opportunity to get to know faculty and be part of a community

are common sentiments that students shared about their educational experience in a community college.

Lee attended community college after high school so she could be closer to home and help care for her younger brother. Community college also allowed her more time to learn English and build her academic confidence before beginning at a four-year institution. Her family had immigrated to the U.S. from Vietnam before her junior year in high school, and her parents had returned to Vietnam leaving her with more responsibility for her younger brother. Community college provided Penny with the opportunity to acclimate to U.S. culture after relocating from China with her family. After completing one semester of university in China, her family moved to the United States so she could access better education. When arriving, she spoke very little English, and Penny shared that taking community college courses in the humanities outside of her intended major of computer science allowed her the opportunity to learn about American culture.

For many students, high school counselors and teachers not providing information about college options was significant in their educational trajectory. By not discussing options or proactively offering information and guidance, these institutional agents served as gatekeepers to higher education, effectively eliminating a four-year school as an option immediately following high school graduation. While 10 participants enrolled in a community college after high school due to a confluence of factors, including not having been supported in preparing for and exploring post-secondary options, not being accepted to the four-year schools where they applied, or due to financial and/or family responsibilities, five students made a conscious choice to attend community college after

weighing available options that included admission to four-year universities. Reasons for choosing community college in the latter scenario included lower cost and the possibility of transferring to a better school than they would have gained admission to out of high school. These students serve as a powerful counter-story to the dominant narrative because these students were empowered in their decision-making to choose community college over other options after high school.

Research Question 2

What community-based and institutionally based resources do first generation community college students leverage for information to support successful transfer to a selective four-year institution?

Institutional Informational Resources

The qualitative data shows that students relied on a variety of resources for information about preparing for transfer. Online research—most often utilizing the official statewide Assist.org database—was where six students said they received the majority of their information about transfer, followed by EOPS (5), counselor (3), honors program (2) and siblings or peers (2).

The quantitative data supports this finding but differs slightly. Community college counselors were rated as the strongest resource for information about transfer eligibility to a four-year school, with 80.9% of the survey participants indicating they "strongly agreed" or "agreed" that a community college counselor provided them with information about transfer eligibility for transferring to a four-year school. The next highest responses for information sources was faculty (70.5%), followed by a grouping of

resources that were closely rated by students: specialized program counselor (i.e. Puente, EAOP, MESA, RISE, TAP, honors program) (65.2%), transfer center (64.3%) and friends (63.5%). Further expanding on the impact of a specialized program, 57.4% of students responded that they "agree" or "strongly agree" that the guidance, mentoring and academic support received from participating in a program such as EOPS, MESA, Puente, or honors played a significant role in transferring to a four-year school. However, not all students accessed or had the option of working with these programs. Nearly 20% of survey respondents indicated that they did not participate in any of these programs, though the survey did not ask whether students had the option to participate in these programs and chose not to. While the responses yielded in the qualitative data clearly differentiate students' experiences with general community college counselors and those in specialized programs such as EOPS and honors, this same pattern did not show up in the quantitative findings. One explanation for this may have been the wording of the options in the survey questions. It is possible that when students read "community college counselor" as an option, they may have grouped general community college counselors and counselors associated with a specialized program into the same category. Another explanation could be that not all students had access to a specialized program counselor. While 98.3% of survey participants indicated that a community college counselor was available to them, only 83.5% said that a specialized program counselor was available.

In the qualitative data, students discussed receiving such types of transfer information including what courses to take to prepare for specific majors at specific four-year schools, how to develop an academic plan to facilitate transfer, how to complete the

application process and assistance with completing the four-year application. A common theme shared by students is that community college counselors emphasized transfer to a CSU. There were exceptions to this experience, however, when students came into contact with a particular counselor or faculty member who encouraged the student to aim higher and apply to a UC. Students described meeting with counselors in a variety of departments where they received transfer-related information, including general college counselors, counselors in the transfer center, and counselors in specialized programs including EOPS and honors program. While students who described assistance they received from general counseling support as transactional, students who worked closely with either EOPS or an honors program provided rich, detailed descriptions of the types of support received, the structure of the programs and the positive impact of having access to those services. Students emphasized the personalized and structured nature of the support. Other benefits of these programs discussed included access to a designated counselor or faculty member, priority registration and access to a community of peers who were also transfer-bound.

Sonya, who transferred to Berkeley after two years in a community college—working 35 hours a week while taking 17 units—contrasted her experience working with a general counselor and the support she received from a counselor in EOPS:

> It's funny because before I found EOPS, I had met with a counselor and they told me, 'Well, you can finish in roughly three years.' They weren't really that encouraging when it came to actually transferring out of there. … If it weren't for EOPS, I don't think I would have transferred as quickly as I did.

David had been in AP courses in high school and sought out the honors program at his community college because he learned about the benefits of being involved with an honors program through his own research, including priority registration, access to

certain courses, and guaranteed acceptance to certain four-year institutions, including certain UC campuses. Beyond the logistical advantages, David was drawn to the program because of the faculty associated:

> I felt like she's been like a core reason why I really wanted to or a core reason why I believed I could get into Berkeley, and she's like an inspiration for a lot of students at my community college.

Edgar relied on counselors in his campus' TRIO program as his primary source of information for planning to transfer. He benefitted from individualized attention from a counselor, including assistance determining which type of four-year school would be the best fit for him, access to academic counseling at structured intervals, as well as the opportunity to visit four-year campuses. Edgar shared:

> If it wasn't for that program, I think I could have potentially managed to have transferred but it probably would have been more bumpy in terms of how much time it would have taken or just in terms of navigating the community college system because I definitely noticed that a lot of people just get kind of stuck. And a lot of my friends who ended up going to community college ended up dropping out.

Being part of EOPS, honors or another specialized program gave students access to an increased level of social capital. Beyond the one-on-one advising and access to reliable information from a trusted source, EOPS and honors programs acted as a hub through which students were connected to other capital-rich resources, including scholarships, campus visits to four-year institutions, UC Berkeley-based programs for prospective transfer students and other schools, which served as a significant source of information, motivation and encouragement.

Other institutionally based resources that students cited as sources for information about transfer included transfer events, workshops and visits from four-year campus representatives. However, not all students had access to these types of events and

resources at their campus, and even when students did attend a campus that provided these type of resources, students did not always utilize institutionally-organized transfer events. For example, while 66.1% of students indicating that a special course, seminar or workshop focused on transfer preparation was available but only 8.7% of students indicated they used this resource a "great deal." A similar pattern was found for such resources as a transfer event on community college campus with 85.2% of students indicating that a transfer event was available but only 12.2% of students indicated they used this resource a "great deal." Similarly, 85.2% of students indicated that a representative from a four-year institution (i.e. admissions, outreach staff, student organization representative) was available but only 20% of students indicated they used this resource a "great deal." In the qualitative data, when students were asked what resources their campus provided to support transfer, many students talked about these types of events—transfer events, workshops, the opportunity to meet with a four-year representative—however, these types of resources were not cited as primary sources of information for students. Most often students talked about not attending events because of other obligations, including work or family responsibilities.

This section includes examples of sources of social capital students accessed through institutional resources, namely counselors, faculty, EOPS, and honors programs. The logistical support provided by these resources helped students successfully navigate the community college transfer process. As will be covered in the following sections, working with these resources built on already high levels of aspirational capital through providing information and assistance in planning academic schedules and exploring options for four-year schools.

Community and Familial Informational Resources

The majority of students interviewed reported that they relied on informal sources of information for transfer preparation in addition to or instead of formal institutionalized campus resources. This most often included students' own online research, peers, or an older family member who had transferred to a four-year school from a community college. An older sibling provided the majority of information about transfer preparation for two of the interview participants. Having an older sibling as a trusted resource was a particularly powerful source of information and provided a sense of belonging and helped decode otherwise unfamiliar terrain. For Mateo, both his older sister and brother had transferred to UC campuses from community college, and his older sister in particular provided him with insider knowledge about navigating the community college system:

> My sister told me, she was like, 'Look, just go sit there, even if they tell you, No, we're full, keep going to classes, and eventually people will start dropping, and they'll give you (an add) slip,' and it worked. And that was pure luck on my part, maybe I shouldn't have risked it that much, but it worked. … But obviously, I don't think I could have done it without my sister, I would have been clueless as to which classes and why.

When describing why they sought information outside of formal institutional information channels, often it seemed to be a matter of both trust and accessibility. For those with an older sibling who successfully transferred, there was an already established level of trust. Other times, students looked to non-institutionally based resources after having a negative experience with a counselor who had either provided wrong information or who had discouraged the student in some way. Five of the 15 students interviewed indicated that they relied on their own research rather than meeting with a counselor. It is possible for students to access a wealth of information about transferability of courses between all California community colleges and the CSU and UC campuses through the official

statewide database found at Assist.org. The online Assist.org database allows students to access information when it is convenient for them. One student noted that once he figured out all the information about transferability of courses and major pre-requisites existed in Assist.org, he did not see the need to go and ask a counselor in person. Another student who experienced negativity in her first interaction with an administrator at her community college when seeking financial aid information related to her AB 540 status decided to rely on her own research from that point forward.

Preparing for transfer involves a great deal of careful planning and strategy in terms of selecting courses. A common roadblock that transfer-bound students encounter is course availability. The majority of students in this study did not encounter this issue due to their involvement with EOPS or honors programs that provided priority enrollment in classes. However, four students started in at least some remedial level courses when they first began community college coursework, including Roberto, who started in remedial math and is now a Physics major at Berkeley. Beginning in remedial coursework, especially math, has been shown to be one of the biggest roadblocks to transfer. Four students decided to switch community colleges after doing their own research and discovering they could access additional resources at another campus that would better support their transfer in terms of access to resources, including transfer-level courses, and other support mechanisms, including a strong undocumented student population in Julian's case. In Oscar's case, after doing his own research about an honors program at another local community college, he realized the other campus provided more resources, including regular advising meetings, campus visits and involvement in research conferences through the honors program. He had initially enrolled in a technical

community college that was closer to home. Despite the fact he was involved with that campus' honors program, he was not gaining access to the same benefits available at the other campus even though he was doing an equivalent amount of work. He proactively reached out to the neighboring campus' honors program director and inquired about transferring to that school and joining the honors program.

The findings in this section demonstrate that students relied on a combination of institutionally based and community based resources. What is particularly noteworthy is the value of the capital rooted in family and community that students leveraged to support their successful transfer. The insider knowledge students gained from older siblings informed them of the unspoken knowledge needed to efficiently navigate the system, which includes not blindly trusting information from institutional agents. Students' demonstration of relying on their own planning based on information from Assist.org is a strong example of navigational capital, which Yosso (2005) defines as demonstrating "individual agency within institutional constraints" (p. 80). It is important to highlight the role that familial-based social capital and self-navigation had in these students' journeys because these attributes are not typically recognized as valuable in educational attainment and persistence. The findings from this section demonstrate students' strength, empowerment and agency in successfully navigating the transfer process.

Research Question 3

What community-based and institutionally based resources facilitate motivation and/or encouragement for first generation community college students in successfully transferring to a selective four-year institution?

Institutionally Based Sources of Motivation and Encouragement

Students drew on sources of motivation and encouragement from a variety of institutionally based and community based sources. This support served different functions, including motivation from a faculty member or college counselor that was instrumental in encouraging students not only to persist and transfer but to aim higher and transfer to a UC. These resources strengthened students' existing aspirational capital and helped them develop a scholar identity and envision themselves at a school like Berkeley. The impact of a faculty member or counselor differed depending on whether the student entered community college from a high school with an embedded college preparatory curriculum. For students who came from a resource-rich high school, the impact of high expectations and encouragement from administrators or faculty still positively impacted students. However, for students who had not previously been supported in developing a scholar identity or encouraged to envision themselves at a top-tier research institution, the impact of a supportive counselor or faculty member was transformative. The most frequently discussed sources of motivation and encouragement for the participants within the community college space included faculty or an EOPS counselor. Eight of the 15 participants described the significant positive impact that a faculty member had made in their educational journey, while six talked about the significant positive impact of a particular counselor in encouraging them. Some students were fortunate enough to benefit from guidance and support from both a significant faculty member and counselor.

The quantitative data supports this finding, with 82.6% of survey participants indicating "strongly agree" or "agree" that faculty provided them with motivation and/or encouragement to transfer to a four-year school, followed by peers (80.9%). Other highly

rated sources of motivation and/or encouragement were visiting a four-year institution (68.7%), parents (65.2%), community college counselor (63.5%) and specialized program counselor (61.7%). ***Figure* 7** illustrates students' experiences with receiving support from various institutional and non-institutional resources, comparing whether a student received informational support versus motivation/encouragement.

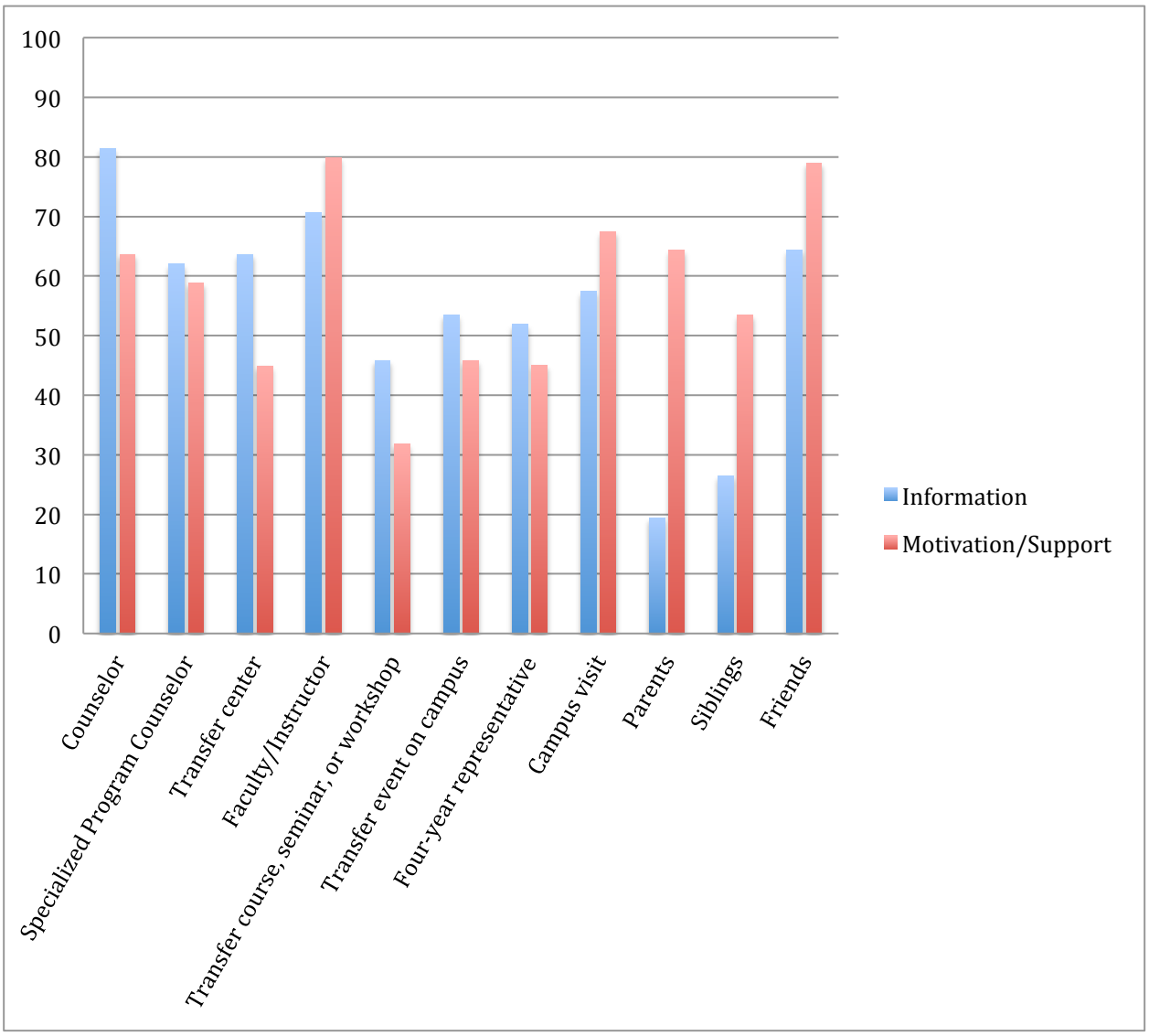

Figure 7. Comparison between type of support received from resources. Includes percentage of students who indicated "strongly agree" and "agree."

When describing the ways in which faculty and counselors provided encouragement, students talked about aspects such as faculty holding high expectations for them and encouraging them to raise their educational aspirations beyond transferring to a CSU and instead aim for a UC campus. Several students described a mentoring relationship they developed with a faculty member who helped them learn about different career paths, such as Leanora learning about the option of an applied math major and what it would mean to pursue a PhD based on a community college faculty sharing her own experience. Students described feeling supported by faculty who took a personal interest in them and their success and encouraged them to aim higher through writing letters of recommendation and informing them about scholarship and academic enrichment opportunities such as Fly to Berkeley. For Gustavo, participating in Fly to Berkeley allowed him to visit the UC Berkeley campus for the first time. This visit was a pivotal experience, as Gustavo had been accepted to Berkeley but did not plan to accept the admissions offer. Gustavo's EOP counselor nominated him for the opportunity to participate in the program. It was after his visit to Berkeley during which he was able to connect to the campus' strong support community for undocumented students that Gustavo changed his mind and decided to attend Berkeley.

Several students described the positive impact of meeting a faculty member who believed in them, gave them positive feedback and encouraged their development of an academic identity. This was a particularly healing experience for students who had been previously disengaged or discouraged during their pre-college education. Gustavo entered community college after having faced lowered expectations during high school and had insecurity about his ability to write papers in English due to the fact that English

is his second language. This began to change once he found a particular English professor at his community college. When he first enrolled in community college, he was in remedial English. Through his work with this particular professor who provided positive feedback and encouragement, Gustavo began to recognize his academic potential and ability as a student. Once he received letters of recommendation from this faculty member, Gustavo learned that he had earned the highest grades in her class, and she encouraged him to take a placement test to advance into transfer level English courses. When Helena re-entered community college, she knew that she wanted to pursue higher education but did not have a specific end goal. Immediately after high school Helena completed a semester and a half of community college before deciding to leave and go to work full-time. She described having not been engaged with her education in high school, and her academic self-concept started to shift when she encountered a particular faculty member who took the time to work with her on improving her writing, helping her believe in her ability as a scholar which helped her begin to see transfer as a possibility and goal. For five of the 15 students, a faculty or counselor was pivotal in encouraging them to apply to UC campuses instead of solely targeting CSU schools for transfer. David shared:

> whenever I think of my experience at my community college, the first thing that pops up were the teachers that were really good and inspirational and who helped me and helped other students reach their goals. I even had one professor from sociology who really inspired me to change my major, who was willing to write a letter in case I got rejected from Berkeley to appeal the admission process.

For Gustavo, his EOPS counselor also encouraged him to expand his goals to include transferring to a UC school based on his grades and performance in community college:

> (My counselor) would make me make appointments with him, so that we could look over the schools that I was interested in. He was looking at my GPA and

> encouraging me to look at UC Berkley, at research institutions, which I didn't think of, I wasn't gonna apply to, so yeah, he's the one that made me decide to apply to (the UCs).

Faculty and Counselors as Examples of Persistence

Working closely with a faculty member or counselor who acknowledged the challenges that community college students faced in their pathway to transfer and challenged and encouraged them to overcome the odds and to not be a statistic was particularly impactful for Edgar, Oscar, Victoria and Mateo. Often, these students shared that the faculty drew on their own personal experiences overcoming challenges as a person of color in their own educational pathways. This was a particularly powerful form of both social and resistant capital, as it allowed students to see an example of someone else like them who had succeeded in higher education. For some students, faculty challenged them to think critically about the educational system and to strive for more than the system expected of them. Oscar shared his experience with this:

> (my professor) had us read these really critical analysis, regarding society and the standpoint of Latinos, and he really employed that kind of, 'Analyze yourself,' right? Like, 'Why are you in this certain position?' Right? And so that just kind of opened my eyes.

Mateo shared a memorable lecture that one professor gave:

> (my) professor said, 'The odds are against you; you're not supposed to transfer, you're not supposed to graduate. … (The) rate of transfer rate is very low, perhaps even the lowest in the district of the college there, but challenge that, don't accept that and say, 'Well, I'm just like everyone else.' Always keep working and saying, 'No, I can do it and I can prove you wrong, I'm not gonna be a statistic. I'm gonna be that 1% that goes off and does something.'

Edgar talked about a faculty member who addressed inequities within the higher education system and the powerful impact this had on his educational experience:

> (the professor) was very up front about the challenges that community college students face and the challenges that I face being from an under-represented group.

> And the kind of circumstances that I'm dealing with coming from the environment that I'm coming from. … That really helped me stay grounded to the reasons as to why I'm doing this for my community, for my family. The fact that there's not a lot of Latino/Latina folks and students of color in higher education. He was constantly reminding me about those things.

Many students in this study benefitted from the support and guidance of faculty and counselors who were deeply invested in their success. These students found administrators who deeply cared about them and their success and went the extra mile to support and encourage students to transfer. This work went beyond logistical course planning or delivery of course content in the classroom. These faculty and counselors shared their personal stories with students about overcoming obstacles in their own educational journey or talking about their experience in a four-year university. These "transfer champions" (Pak et al., 2006) took the time to get to know students on a person level and served as reliable, accessible sources of information throughout the transfer preparation process. This is significant to note because not all students in a community college setting have access to this type of support as not all faculty and counselors go above and beyond formal job descriptions in these ways. These institutional agents served as rich sources of social and resistant capital, supporting the students' successful navigation of the transfer pathway. Through the guidance and advocacy these institutional agents provided, students' already high aspirational capital increased. Every time a faculty or counselor encouraged a student to dream bigger or aim higher, they fostered resistant capital in the students, encouraging them to challenge the expectations that community college students do not transfer or only transfer to a CSU, or that students who start in remedial coursework do not transfer.

Drawing Strength from Peer Communities

A key example of social capital for many students came in the form of a strong peer network at the students' community college, particularly made up of other transfer-bound peers. Data from the survey showed that peers served as a significant counter-narrative to the dominant story that exists around low transfer rates, with 80.9% of survey participants indicating that they "strongly agree" or "agree" that peers provided motivation and/or encouragement for transfer; 61.7% of students said they "strongly agree" or "agree" that knowing someone else from their community (i.e. friend, sibling) who transferred to a four-year school helped them believe they could transfer; and 76.6% of students said they "strongly agree" or "agree" that being part of a community of peers in their community college who were also working toward transferring helped motivate and support their preparation to transfer.

In the qualitative data, several students talked about how being surrounded by peers with similar goals helped to motivate them to continue toward transfer. For students whose high school peer group did not continue into or persist through post-secondary education, finding a peer group in their community college was particularly powerful. First generation college students who often felt alone in the process of navigating higher education talked about the importance of having a peer group they could share the experience with. Oscar was connected by a faculty member to the Center for Community College Partnerships (CCCP), a UCLA-based program focused on community college transfer. Through participating in this organization, Oscar's self-concept started changing, and he began to not only believe that he could transfer to a UC, but he also began to understand the significance of continuing his education as a young

man of color. One of the biggest factors in this shift was being surrounded by and meeting peers who had transferred to a UC:

> I would have never thought of like, say applying to UCLA, right? Because in my mind, I was like, 'Well UCLA, that's out of my league.' But once I got introduced to a lot of people who were doing it or who had transferred already to UCLA through the honors program, I remembered, 'Well, I'm gonna go for it and I'm gonna apply to UCLA.'

Edgar shared the following:

> (TRIO) was by far the biggest support system on campus. The people I met there were also very motivated to go to a four-year institution and I felt like my peer group that I was talking to and interacting with on a day to day … that helped me stay on track. … They helped me stay grounded to the reasons as to why I was doing this. They were doing it for very similar reasons, similar circumstances they were going through and in certain cases, they were going through even more difficult situations. I think it was constantly having that peer-to-peer support that really helped.

Leanora also described the importance of peer support:

> Knowing that they were trying too transfer too, and they had kinda the same goals as I did, and they were going through the same kind of questioning like, 'What classes do I need to take? What school should I go to? What should I write on my UC applications?' Having them going through the same experience was really supportive for me, 'cause I just had no idea.

Even if students were not actively part of a transfer-focused program on their campus, the opportunity to meet other transfer students through in-class presentations or outside of class activities made a significant impact on students. Students talked about the positive impact of seeing students from their college transfer to a four-year institution, which helped them see that transfer was possible. Roberto shared the impact of seeing a presentation from a student who had transferred from his community college in which he talked about working in the world-renowned CERN lab in Geneva as a physics student. This made Roberto feel it was possible for someone from his community college to go on

to gain access to one of the premier research labs in the world. In his time as a Berkeley student, Roberto has also studied at the CERN lab.

Seeing examples of students who had successfully transferred was particularly impactful for undocumented students, who face a uniquely challenging set of social and institutional barriers in progressing into and through the higher education system. For Gustavo and Julian, coming to Berkeley through a yield event such as the Cal Summer Experience or Fly to Berkeley allowed them to experience being on campus and meet people within the Berkeley community, particularly within the undocumented student support network. This lived experience of seeing the support available on campus helped each of them envision themselves as a Berkeley student.

While peers played a significant role for many students in this study, not everyone had the benefit of a strong peer network due to a variety of factors, including attending a low-transfer rate school, working full-time and not having the opportunity to be involved with the campus community, or not feeling connected to the students around them. Sonya attended a community college with a perpetually low transfer rate and did not feel like she had a community of peers on the same path:

> I never really had peers on campus that were on the same track as transferring. 'Cause a lot of the students I went to high school with, they are still there. I don't think there was anybody from my generation of community college that transferred to a four-year right at the two-year mark. All of them are still there. So with that, I couldn't really relate to them necessarily. So that was my experience with peers on campus. There wasn't really anybody that I could relate to and go through the whole transfer process with them. It was just a one-person transition.

Penny shared a similar experience. Her family left everything behind when they immigrated to the U.S. from China so she could pursue higher education. Despite this, she acknowledged that her parents were able to provide more financial support than most

of her classmates, allowing her to focus more on school and direct her energy toward transferring to a top four-year school, which was the goal when her family moved to the U.S. Penny shared:

> I was not able to really get to know many people with whom I share this similar expectation. 'Cause many of them are single mothers, they want to become nurses, or some would give up pretty quickly. I didn't really see a lot of students like myself who had just have a clear goal, and then work really, really hard for it. I was taking six, seven classes per semester.

Both the qualitative and quantitative data demonstrate the powerful impact of having access to a peer network of transfer-bound students. For the majority of participants, meeting students who had overcome the odds and transferred to a UC was a living counter-narrative to the daunting statistics regarding community college transfer. Students meeting others from their community college, their home communities or seeing other students of color or under-represented students helped them see that students "like them" belonged at schools like UCLA and Berkeley. Edgar described visiting Berkeley in his senior year of high school with the TRIO program he was part of. He described not seeing himself, both in terms of not seeing many students of color on campus and also not feeling like he belonged there because of his high school grades and preparation. It was through his experience with EOPS, student government, and community involvement that his self-concept shifted and he began to believe he belonged at Berkeley. He recalled his experience visiting Berkeley during high school:

> I did not see myself here. I didn't feel comfortable. I didn't feel like it was a campus for me at that time. I felt like I was out of place. I was just a visiting student, taking the tour, seeing what they had to offer … I think a lot of it came down to the fact I felt that it was not accessible to me, my grades at the time, it was such a top tier institution. I felt like maybe I was not academically prepared. I didn't see a lot of people who looked like me. And I just didn't envision myself here. It's interesting because now I look back on that because now I'm a student here.

For many students, peers served as a critical source of not only social capital in terms of providing information but also aspirational and resistant capital as well. Community college students being able to see examples of students who successfully transferred helped them build on already high aspirations to transfer. Resistant capital came from seeing examples of students who had overcome the odds to go on to a UC. These examples served as powerful counter-narratives to the dominant story about community college students not transferring.

Familial Influence on Post-Secondary Education Aspirations

The majority of students talked about their family as a source of motivation and inspiration for continuing in higher education, despite the challenges and roadblocks that they faced. For the majority of students family was a source of strength, encouragement, and motivation. Eight of the 15 participants said their family had always expected them to go to college. Students' families provided emotional support, financial support such as letting them live at home rent-free or providing a car, or help with expenses so they did not have to work or could work less. Leanora described how her mother emphasized the importance of school and made sacrifices in order to support her education:

> we grew up really poor, so it would've been really easy for mom to be like, 'Hey, you need to work and make money 'cause we don't have enough.' My mom never did that. … she always told us like, 'School is your only job, you have to do it well.'

Sonya also described similar encouragement she received from her mother:

> She's always told since I was little, she has told my sister and I that, 'the world can take anything from you, but one thing that it can't take is your education. Your education's gonna be with you forever. It's up to you to see how far you pursue it.'

Several students talked about feeling a sense of responsibility for continuing their education in order to gain additional career opportunities for themselves but to also help their family. Some students were motivated to pursue higher education because they saw themselves as responsible for their family's social mobility or felt a responsibility to be a role model for their younger siblings or cousins. Quantitative data supports this finding, with 87.8% of students indicating that they "strongly agree" or "agree" that the hardships they have experienced in their family serve as motivation in pursuing a bachelor's degree. Additionally, 71.3% of survey respondents responded that they "strongly agree" or "agree" that their family's emotional support and encouragement helped them transfer to a four-year university; 87% of students indicated they "strongly agree" or "agree" that earning a bachelor's degree will them give back to their community, which serves as a motivation for transferring to a four-year school; and 67.9% of students responded that they "strongly agree" or "agree" that their family values higher education, which motivated them to pursue a bachelor's degree.

Leanora talked about the desire to access expanded opportunity and financial stability that attaining higher education would allow for as a significant motivator for continuing her education and overcoming obstacles she faced:

> I think I was really tired of being really poor. ... We wouldn't have hot water, and we wouldn't have money to eat all the time, and we wouldn't have electricity all the time... I think my mom really sacrificed a lot, really struggled a lot to have us here in this country and to have us go to school. And so, like I said, my brother wasn't really involved and he wasn't really dedicated to his education. And so I felt like it was on me, I have to go to school. I have to get a degree. 'Cause I have to pull my family outta this.… Just knowing that, or having that feeling that I have to take care of my family and I have to support my family. I'm the only thing standing in the way between having a good life... Really just hangs in my head all the time.

Julian also talked about feeling responsible for helping his family access additional opportunity:

> there was always that sense of like me building up a pathway for our family to go from immigrant working class, even lower class, and into something else and I was going to take our family somewhere else.

Edgar talked about the importance of continuing his education in order to pave the way for his brother and other younger members of his family:

> I also had a younger brother. So for me, I was constantly thinking about what kind of path can I help pave to help him once he comes into higher education. What path can I pave so that he can have a much easier time. … So, continuing to go is definitely a motivation to help my family or at least keep that ball rolling to encourage them and motivate them to keep going to school.

For some students, there was an inherent conflict within the desire for social mobility and seeking new opportunities as a result of continued education because it meant leaving their families and home communities in order to attain additional education. For Victoria, the counselor she worked closely with was particularly impactful because he not only talked about the logistical components of exploring transfer options but took the time to talk with her about why it was important for her to set high goals for herself and to continue her education beyond community college despite the fact that her family may not understand what she was going through and she felt pressure to contribute to her family and help take care of them:

> I kind of told him the reasons why I didn't leave was my family. He's like, 'But they're also the reason you need to leave.' So I saw it in that way. Even though my family is supportive because none of them... My parents don't have... Or maybe don't have an understanding of what it is to be in the UC or to get an higher education that you have to go away and study, so he's like, 'You have to do it for yourself and your family.'

Oscar shared the internal struggle he grappled with when deciding to leave the community college located within his home community of South Central Los Angeles in

order to gain access to richer support resources available at a campus in a neighboring community that would increase his chances to transfer sooner.

> I remember that I hated the fact that Central Tech College[2] was looked down upon, and it's because it's in the middle, kind of like South Central LA, so there's a lot... Like the student body has a large black population, and there's a lot of vocational programs, so it kind of has this stigma attached to it, right? And folks from, like say my same neighborhood, they go commute to (other schools) and I'd be like, 'Dude, we have … institutions here in our backyard, and you're not using these resources," right? And so I kinda had an issue with that, that I was working with, but looking back, the reason why I left Central Tech and went to Southern College[3] was because Central Tech's infrastructure of helping student transfer was weak.

Feeling a sense of responsibility and commitment to helping their broader community was a theme that several students talked about as a factor that motivated them to continue their education. Students who had struggled to find their way, for reasons including lack of information about college planning, being undocumented, experiencing racism or discrimination during their education, or being in a tracking system in high school, said these factors made their journey to and through higher education more challenging. Several students shared that they are motivated to persist in their education so they can make changes to the educational system and the larger social system as a whole.

Leanora's post-secondary education process has been filled with barriers because she is low-income and undocumented. Despite these obstacles, she recognizes the privilege she has had in terms of strong encouragement from high school teachers and counselors and the unwavering support of her mother. As she has gained more awareness of the broader issues of inequality in education and the unequal distribution of college

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[2] Pseudonym
[3] Pseudonym

preparation resources and information, particularly for students of color and first generation students, she is motivated to make a difference through becoming an educator to help students like herself:

> That's really empowered me and motivated me to do something in education and to do something to provide safer spaces for students who are underserved, and students who aren't encouraged enough, or students that aren't pushed enough or supported enough to go to school 'cause I think I was just lucky that I was just self-driven and that I had a parent that was really invested in me in going to school, she's always been like, 'That's the only way out. The only way you're not gonna grow up poor like us.' But a lot of students don't have that kind of support, and a lot of students aren't as self-driven, and that doesn't mean that they're not, they don't deserve to go to college.

Helena talked about being motivated to provide the type of support she did not receive in high school to the students she works with currently in local high schools. She described working with a high school student who has a strong GPA but did not envision a four-year college as an option after high school and wanted to enroll in a community college. Helena saw herself in this student and encouraged her to keep her options open and apply to four-year schools anyway, even if she was not sure what she wanted to do:

> We applied to all the UCs, we applied to all the Cal States. We got her applications in. It was just an amazing feeling 'cause I think I was the same point when I was at her age. I didn't know what my college options were. I didn't know how to do any of those things. I didn't know how to navigate that system. And if there was someone...sitting there, going, 'Okay, you don't know it, but let me help you. Let me show you how to do this, and let me give you that option,' I think that would have drastically changed my experience.

The experience of being undocumented and pursuing higher education has motivated Gustavo to want to reach out to younger students and help them navigate the process:

> I just wanna go back to my community and encourage people of color and Latinos, specifically, undocumented students to dream bigger, 'cause it's possible. If I can do it, everybody can do it. … It's just the matter of letting them know it's possible and we need more of you to be here to start changing the system. It's not gonna change from today to tomorrow, but it's a process and people need to start learning those things.

Students drew on rich sources of familial and aspirational capital to progress through the transfer process. A strong theme of feeling responsibility for helping immediate family as well as their broader community can be heard through several students' stories. The feeling of being responsible for their family's social mobility, paving the way for younger family members and wanting their hard work and academic achievement to benefit not only themselves but their family and community are powerful examples of familial capital. Both Sonya's and Leanora's mothers encapsulate aspirational capital. From a young age, many of the participants were infused with the importance of education and their families supported this in any way they could, dreaming for the future despite real or perceived barriers.

Research Question 4

What, if any, are the perceived barriers encountered by first generation community college students in the process of transferring to a selective four-year institution? What strategies do students use to overcome these barriers?

Countering misinformation

Students encountered numerous barriers along the community college transfer pathway. All 15 participants discussed this and included such aspects as finances, balancing work and school, and family responsibilities. For some, barriers included discrimination within the educational system, most pointedly for the undocumented students. One of these barriers students brought up are the complex transfer requirements, especially when preparing to apply to more than one school or more than one major. Within the UC or CSU system, a pre-requisite for a particular major may differ slightly

between schools, requiring students to take additional courses in order to remain eligible for multiple institutions. Additionally, students can only apply to one major at one particular institution, so there is a critical strategic element when choosing courses at the community college level in order to prepare for the major into which a student is most likely to gain acceptance. This requires finding a reliable source of information to help guide the student through this decision process. The difficulty in finding reliable sources of information was a common theme across student experiences. This ranged from counselors being unavailable to meet with students and instead being referred to student workers, being referred to multiple offices when seeking transfer information, to receiving wrong information regarding transfer requirements. Penny shared that when meeting with a counselor, she received incorrect information about planning for the Computer Science major at Berkeley because there are two Computer Science majors, one within the College of Engineering and one within the College of Letters and Science. The counselor was only familiar with the College of Letters and Science requirements because so few transfer students are admitted to the College of Engineering. The student had to do her own research to make sure she took the right classes to remain eligible for the Computer Science major within Engineering.

The majority of students talked about an experience when misinformation cost them time, money or a belief in themselves. And while students expressed frustration with not being able to rely on the formal institutional resources or having to seek out information from multiple resources in order to get an answer they felt was reliable, each student also described the ways in which they successfully navigated the transfer process despite this barrier, including finding a trusted source through their network or relying on

their own research. Quantitative data supports this finding with 89.5% of survey respondents indicating that they "agree" or "strongly agree" with having to seek out multiple resources related to transfer requirements. Additionally, 68.7% of students responded "agree" or "strongly agree" when asked if they navigated the technical aspects of applying to a four-year school by seeking resources that were not readily available. Oscar described his experience seeking information regarding transfer at his first college's transfer center:

> so at the time I had no idea what I was doing and I had to walk into a transfer center, and I wanna know like, 'Hey, so what am I supposed to do in order to go to a four-year?' And the director would always kind of refer you to students, like work-study students, and they wouldn't really answer my questions, and so if it wasn't for (my professor) having introduced me to those people (at CCCP), I probably would have been... I wouldn't have efficiently used my time there at the JC.

Leanora shared that peer networks informed her that institutional resources would not be helpful:

> I never went to counselors and sat down and was like, 'This is my educational plan, what do I do? What classes do I need to take?' Only because I heard such negative things about the counselors there. And I had a lot of friends who did go. They would go to the counselors, and they would say, 'They weren't even helpful. They didn't even know what I was asking. They just went to Assist and told me what to take there,' and I was like, 'I can do that myself.' I can just figure it out, most of my classes, myself.

Helena was told by numerous peers that counselors at her community college were not helpful and to avoid meeting with them. She recalled one particularly damaging encounter with a counselor, which caused her to doubt herself and her planning.

> (The counselor) told me that my GPA wasn't good enough, maybe I shouldn't shoot that far. I was like, 'Alright, whatever.' And then we started talking about classes and she basically told me that if I wanted to finish in the next year, which was my plan, that I needed to go to school full-time, take all the summer units full-time, and that I was further behind than I thought I was. And I left that room crying like, 'I can't quit my job, I can't do this. This isn't even possible.' I wanted

> to be finished. How could I have gone wrong in my own planning? And I called my boyfriend at the time, and he was like, 'Okay, (Helena).' He was like, 'You're the most organized person I ever know. You have spreadsheets upon spreadsheets of all your units you have ever taken, what transfers, what doesn't, what you took..." … He's like, 'You know where your units are,' he's like, 'You know exactly what you need,' he's like, 'You're looking it up all the time,' he's like, 'Trust yourself. She has how many students she talks to a day? She... Maybe she just went over it too fast. … He's like, 'You know exactly what you're doing.' So I went back into my spreadsheet, and I looked and was like, 'Oh, I'm right.' And I was right, but she just had me in tears.

Like many students of color and first generation students, Helena doubted herself and plans that she had created based on official information from Assist.org. Drawing on a strong source of social capital in her boyfriend who reminded her of her strengths in evaluating information and planning, she moved forward with the plans she had developed on her own and successfully transferred to Berkeley, demonstrating resistant capital in trusting herself and not blindly trusting an institutional agent.

It is important to note that the California community college system continues to be critically under-funded, and counselors can range from 1:800 to 1:1,800 (California Community Colleges Chancellor's Office). As student enrollment has increased, counselors are continually asked to do more with less. As such, it is not surprising that students must hunt for information and track down reliable resources. This can be an enormous barrier that for some ends up becoming insurmountable, especially when working full-time, having family responsibilities or commuting. Edgar powerfully sums up the impact that institutional barriers can have on the educational trajectory of community college students:

> I feel like a lot of times people might be driven, they might be motivated but because they feel lost, they get discouraged. And that leads them to either find a job, and I saw this constantly with my peers. People first semester were ready and taking a full load of classes and then during the semester they get a job and then the second semester they're there, they drop classes and they're only going to

> be there half the time and then working more. And then a year later, they might just fully drop out because they see that found that job that they want to just stay there because they feel that they're making the money that they need to support them and their families. I saw this constantly with a lot of my friends constantly. And even going back home it's a reminder of that. Seeing a lot of the folks I graduated high school with, where they're now, they're at the grocery stores, they're working in the fields. They're working other hard labor kind of jobs. That reminds me of the other kind of barriers that there are.

Some students also shared that during their time in community college they wished they had known about certain resources sooner. This was particularly salient for students who were not connected with either an EOPS program or an honors program at their school. These students often shared they found out late in their time at community college about a particular academic support program with a designated counselor or particular academic support professionals focused on transfer. Other students noted that transfer support and resources were concentrated within one area of campus. For participants in this study, this was usually within EOPS or the honors program.

In order to successfully transfer, a major barrier students had to overcome was not only finding information but also analyzing the reliability of the information source. This process of persistently obtaining information and evaluating the trustworthiness of information requires high levels of navigational capital. Students relied on peers and information about who to trust, thus also drawing on social capital. Students also demonstrated resistant capital in questioning the reliability of information obtained from institutional resources and not blindly following advice. Students in this study fell into two groups—those who were part of formal campus based organizations such as EOPS or honors, and those who navigated transfer on their own using other strategies and resources. Both groups of students demonstrated high levels of navigational capital.

Those who benefitted from EOPS or honors programs had to actively seek out those resources. Others demonstrated navigational capital through creative approaches to navigating the system.

Navigating on My Own

While family was a source of encouragement, inspiration and motivation for many of the interview participants, students also shared a variety of barriers associated with their family, the majority of which resulted from them being the first in their family to enter post-secondary education. A recurrent theme for participants centered around the fact that while many families had high expectations for the students' education and wanted them to pursue higher education, their family, and most specifically their parents, were not able to provide information or guidance on how to navigate the post-secondary exploration, planning or application process. Families provided support through such avenues as letting the student live at home rent-free, providing a car, or providing financial assistance so the student either could work less or not at all. Several students shared that their family supported them with housing, food and transportation even when they did not truly understand the journey the student was on and what it took to succeed in higher education. This is an example of aspirational capital from families, with families offering a plethora of supports in ways they were best equipped to provide to support the students' paths toward higher education, which many families saw as critical in their family's access to additional opportunity and financial stability. Students shared they sometimes felt disconnected from their families when they could not engage in conversation and discussion about what they were learning in school. Edgar shared:

> It was not easy sometimes because my parents didn't understand, like why are you on campus so late. And then that's where I had to explain it and sometimes they didn't grasp it. Those different barriers in terms of knowledge or information in that way there was somewhat of a disconnect. But they still supported me nonetheless. Then they'd tell my brother, 'look at him, look at what he's doing. Try to see if you can follow something along those lines.'

While the majority of students' families either actively encouraged them to pursue higher education, four students' families were accepting of them pursuing post-secondary education but it was not necessarily expected. Only one student's family actively discouraged his pursuit of additional education. Gustavo, whose parents at one point encouraged him to drop out of high school so he could start working, shared the following about the conflict he endured with his parents:

> I would stay up until maybe 2:00 AM sometimes doing my homework, and it would bother my dad. I don't know why, 'cause I was just doing my own thing and he would just get mad for it. So it was just things like that, that just really bothered me and at that point I just moved out of the house and I had to get a full-time job, so I was also working 40 hours while going to school. And so, I guess when they saw me go out of the house, they sort of gave me a little bit more respect, on regards to what I was doing with my life, which was working and going to school.

Five of the 15 students interviewed worked full-time, and seven others worked at least part-time. Quantitative data supported this finding with 80% of survey respondents reporting they "agree" or "strongly agree" that in order to pay for school, they worked while taking classes, requiring them to balance both work and school. Additionally, 59.1% indicated they worked at least part-time while attending community college, and 27% indicated they worked full-time, which was defined as 40 hours a week or full-time equivalent. Earning money for tuition and/or living expenses is a reality that many first generation students face, and those who worked full-time shared that they were not as involved with on-campus organizations and resources as they would have liked. And

while working full-time created a barrier for students in terms of connecting with campus resources, Helena shared that her experience working full-time for five years before returning to community college helped her develop skills that allowed her to navigate the complex transfer process on her own, as she was a student who did not rely on on-campus counseling to assist her in planning to transfer.

Finances played a significant role in many of the students' decisions to attend community college after high school. The impact of finances varied from student to student—with some sharing that their family had been negatively impacted by the 2008 financial crisis as a significant determining factor in their decision to attend community college. For undocumented students in particular, finances played a major role in their post-secondary journey. While Leanora applied to and was accepted to Berkeley after high school, she was unable to attend because as an undocumented student she did not have access to financial aid at the time. Both Julian and Gustavo did not apply to four-year schools because they did not think they would be able to attend due to their immigration status. Julian was unaware of the AB 540 tuition benefits when he first started community college, so he took fewer classes because that was all he could afford. Both Leanora and Julian shared discouraging and damaging experiences they encountered when seeking assistance from a community college administrator for funding through AB 540. Leanora described her initial experience meeting with a community college administrator:

> When I went there I said, 'Oh, I have this affidavit 'cause I'm AB 540 student and what do I do, where do I turn it in?' … He basically said like, 'Oh. I'm really glad you're going to school and stuff and that's really great, but you're taking a lot of money away from students who were born here.'

Julian shared a similar experience:

> I would go to my counselor at (my college) and ask like 'hey I heard about AB 540,' and there was a certain look they would give me and it really made me feel uncomfortable. They'd be like, 'Oh,' and then would hand me the sheet for affidavit and tell me fill this out. It made me feel really uncomfortable. But that's primarily the climate of (my hometown) like it's a very small, conservative town. It's primarily Latino and very anti-immigration, it's really awkward but I left, so I left. It was very uncomfortable there. A lot of my friend's parents were like border patrol agents, so I couldn't talk to them about my legal status.

Both students described being deeply affected by these interactions and either not seeking additional support from an institutional agent, or in the case of Julian, transferring to a different community college with a supportive campus climate and culture for undocumented students. In reflecting on what that meant for her journey, Leanora shared that she wishes she had not let that initial interaction impact her so greatly because she was on her own after that point:

> I wish I would've been like, 'No, you should've gone to talk to a counselor and if that counselor didn't help, you should've gone to talk to another counselor, and if that wouldn't help, you should go out to another one.' It would've been a lot less stress on myself. A lot less burden to carry a lot less, like, 'I have to do all of this. And if I make a mistake, it's my fault.'

Students encountered numerous barriers in the community college transfer process as a result of being first generation and navigating the process without information from their parents, being low-income and working part-time or full-time while going to school, or being undocumented and facing discouragement or discrimination in the process of attending school and seeking resources such as financial aid. With each of these sets of circumstances, students demonstrated navigational capital in finding information and resources of information on their community college campus through formal and informal sources, and balancing work and school responsibilities.

Students also demonstrated resistant capital in continually seeking information and defying expectations in overcoming challenges, low expectations or discouragement from institutional agents or their families.

Overcoming Barriers

Students shared numerous examples of persistence and resistance throughout their stories. A common underlying theme in every student's journey is a determination to continue forward on the path toward attaining post-secondary education and transferring to a four-year university despite facing numerous barriers and obstacles, including institutional, familial and social. For some students this persistence was illustrated by taking initiative to do their own online research to find information about transfer requirements, or doing their own research about academic support resources at other institutions and deciding to transfer to a different community college to give themselves a better opportunity to transfer to a four-year institution sooner. Initiative was shown in students actively participating in classes, which helped them form relationships with faculty who ended up becoming mentors and a significant source of support and encouragement in the transfer process. Persistence was demonstrated in continuing to seek information and answers from community college administrators when the first source of information turned out to be incorrect or did not meet the student's needs.

When Edgar started community college, he knew he wanted to transfer. He had not been prepared in high school to apply to any four-year schools, which served as additional motivation to transfer quickly. He began his research even before starting community college to better understand all that he needed to do in order to transfer as quickly as possible:

> I knew coming in I had to take action. And I did. I sought out different programs like EOP. I sought them out and I took even a transition class during the summer to acclimate to the community college environment. I even took a class to test out to see how the workload was going to be. And it helped because it gave me a better sense of what I was getting in to.

For Sonya, after not gaining acceptance to any of the four-year schools to which she applied and having to instead attend the local community college that was known for having a low transfer rate, she knew she had to be proactive from the beginning in order to successfully transfer. For Victoria, after receiving wrong information from a counselor which caused her to stay in community college longer than she wanted, she took action and sought out different information sources and was determined to find someone to help her navigate the system:

> I was like I can't sit here and wait, I have to be proactive and find my own and I kind of found (my counselor). I was like I need someone that's gonna help me transfer because that's gonna happen … I had to be more assertive in what I needed to do or how to... I couldn't wait on people. Like I had my teacher in high school, she helped me with a lot, but I knew at some point I had to help find my way through myself.

A recurring theme throughout each interview is resistance to other people's expectations, negative messaging, doubts, or institutional barriers, and the ways in which students drew on strength in order to navigate what for some had been a hostile experience in the educational system. Eight of the 15 students interviewed explicitly talked about being motivated to overcome others' expectations and defy the odds and continue their education as a person of color as a significant motivating factor in their persistence in post-secondary education. Edgar described his experience as follows:

> One of the many driving factors, that people constantly reminding me that there are just so few of us obtaining higher education for a wide variety of reasons, that it was that much more important to have people like me attaining higher education or people of my background attaining higher education. I use that as part of my motivation.

Oscar talked about the significant impact of being involved with the Center for Community College Partnerships (CCCP) program at UCLA in developing his confidence and raising his expectations for himself. Through CCCP Oscar was exposed to curriculum, rooted in Critical Race Theory, which helped him develop a critical consciousness. Through the readings and coursework he completed he began to realize the importance of continuing his education as a person of color so that he could influence change in the system.

The undocumented students interviewed shared especially powerful experiences about the way inequality has served as a motivation for them to persist and prove people wrong. These students in particular have had to navigate significant systematic and social barriers in order to access post-secondary education, and students in this study have turned what once was a road block into the fuel that ignites their educational passion. Leanora shared:

> I think it's a source of motivation, especially with a lot of anti-migrant rhetoric in the United States right now, and the fact that I am undocumented, and I am Mexican and I'm going to Berkeley. ... I feel like a prestige. I'm undocumented and made it here. And I have to keep pushing past that even when a lot of the people around me... And even sometimes educators, like in my community college there was one person who just was racist about that stuff too. That really motivates me to not let that emotionally deter me, or mentally deter me.

Julian shared:

> so even though this backwards rhetoric had kept me away from a lot of resources, once I was comfortable enough to challenge that rhetoric, it almost became a sense of inspiration of well I'm going to prove you wrong, I'm going to do it anyway. … and I tell myself every time I wake up, every time I walk into Sather Gate it's me stepping in here is an act of protest. I don't need to be on the streets, even though I might get on the streets if I need to protest, I can just, just me sitting in a classroom when there are almost 50 percent of the country that say that I don't belong there, is an act of protest. And it's a source of inspiration just walking onto this campus everyday, knowing that I'm defying some form of Xenophobic rhetoric that just being here is defying.

Students shared several powerful examples of drawing on resistant capital to overcome barriers they encountered in the transfer process, including access to reliable resources of information, discouragement from institutional agents, and the process of navigating post-secondary systems without parental guidance. Students leveraged powerful sources of social capital embedded in sibling relationships and peer networks, aspirational capital from family, peers and community college faculty and counselors, and developed strong resistant capital through the development of a critical consciousness. These are key components that supported students' successful transfer to an elite four-year institution.

Conclusion

The students in this study embody incredible examples of resistance, resilience and strength. The path toward transfer from a community college is littered with obstacles and barriers. This challenging landscape is even more treacherous for first generation college students, who are often academically under-prepared, have graduated from under-resourced high schools and enter post-secondary education with a complex set of personal circumstances; this is further complicated by the fact their K-12 educational experience was likely deficit oriented. The overwhelming majority of students who enter community college systems do not transfer to a four-year university due to a number of complex factors, including finances, K-12 preparation, remedial coursework, over-crowding and difficulty accessing required courses in community colleges and a more competitive landscape at the four-year level, making it difficult for eligible community college students to gain entry to a four-year school (Moore, et al., 2009; Hagedorn et al., 2002; Hagedorn et al., 2004). The importance of reliable and

available institutional agents such as faculty and counselors as a pivotal factor in educational attainment of first generation students cannot be overstated.

This study shows the diversity of educational history community college transfer students bring with them to post-secondary educational spaces. And while there are unique aspects within each person's journey, several core themes were present across each student's story. Each of these students succeeded despite the odds due to a combination of high levels of community cultural wealth, most notably navigational capital, resistant capital, familial capital, aspirational capital and social capital. These are assets not traditionally recognized as core reasons for student success. Some students benefitted greatly from the support and guidance from an institutional agent such as a counselor or instructor, while others were guided by an older sibling, and others navigated the process on their own. What is true for each student is they transferred to one of the world's top universities because they were persistent and resilient and successfully navigated a complex system that was not designed for their success.

The dominant narrative that exists in research literature centers around traditional forms of social capital and holds that first generation college students who successfully transfer, especially those who transfer to an elite university, are "lucky" because they were able to tap into rich sources of social capital, most notably institutional agents. Traditional social capital theory frames student success as being dependent on external factors and utilizing traditionally valued forms of capital such as forming serendipitous relationships with institutional agents. What is overlooked are all of the individual characteristics and qualities that enable students to persist and succeed up to the point of

transfer. This is what community cultural wealth recognizes. Community cultural wealth recognizes that students' skills and abilities are valuable and are reasons for their success.

Through qualitative and quantitative methodologies, the findings from this study help us better understand the factors that propel and impede the progress of first generation college students toward transfer from a community college to an elite four-year institution. Through counter-storytelling present in the qualitative methodology, this study's findings are built with the lived experiences of first generation college students, which are critical sources of information for recommendations for policy and programmatic changes.

This chapter presented findings and analysis based on both qualitative and quantitative data to answer the four central research questions of this dissertation. This chapter included a summary of the study and an overview of methodology and participants. Demographic information was provided for survey participants, and biographical and demographics were included for interview participants. Lastly, the findings and analysis of data is presented, organized by research question.

CHAPTER V

IMPLICATIONS, CONCLUSIONS & RECOMMENDATIONS

Summary of the Study

Increasing post-secondary degree completion is a national priority as jobs are increasingly requiring postsecondary education. First generation college students are more likely to enroll in a two-year institution immediately following high school completion (Engle & Tinto, 2008), often with the intent to transfer to a four-year institution. Gaining an understanding of what factors encourage or impede the transfer pathway for first generation community college students, with a particular focus on students of color, is critical particularly in California. The California community college system is the largest post-secondary education system in the U.S. and serves more students of color in California than the CSU and UC systems combined (CPEC, 2008). With an increase in students accessing community colleges projected to continue in California, a high demand for quality education will be continued to be placed on an already stretched and under-funded community college system (California Tomorrow, 2002).

What is missing from the current dialogue in the research literature is a contextual understanding of the assets and strengths that first generation college students bring with them into the community college setting, and the tools and resources they leverage to support successful transfer to a four-year institution. This study utilized the theoretical framework of social capital (Stanton-Salazar, 1997) and community cultural wealth (Yosso, 2005) and was guided by an over-arching paradigm of Critical Race Theory. Through focusing on the voices of the students, this study is grounded in counter-story

telling which serves as a challenge to the dominant narratives that do not recognize the strengths and resources that students leverage from their family and home community and bring with them into an educational setting. Numerous studies have shown the important role that traditional social capital serves in the post-secondary exploration and preparation process, however few have focused on the powerful impact that forms of community cultural wealth have on the educational trajectory and persistence for first generation college students in general and in the process of transferring from a community college to a four-year institution in particular. I utilized social capital and community cultural wealth frameworks to investigate the following research questions:

1. What role does the community college play in the pursuit of post-secondary education for first generation college students?

2. What community-based and institutionally based resources do first generation community college students leverage for information to support successful transfer to a selective four-year institution?

3. What community-based and institutionally based resources facilitate motivation and/or encouragement for first generation community college students in successfully transferring to a selective four-year institution?

4. What, if any, are the perceived barriers encountered by first generation community college students in the process of transferring to a selective four-year institution? What strategies do students use to overcome these barriers?

These questions informed the qualitative and quantitative methodology of this study, which included 115 survey respondents and 15 interview participants. All participants are first generation college students who transferred to UC Berkeley from a California community college. Individual interviews using a semi-structured interview protocol was the guiding source of data used for analysis of the study's findings with descriptive statistics used to support and provide context for the qualitative findings.

Through utilizing a CRT framework and drawing on Stanton-Salazar's (1997) social capital networks and Yosso's (2005) community cultural wealth framework, the findings from this study challenge the dominant narrative that exists about first generation college students, one that emphasizes their short-comings instead of highlighting their individual and collective strengths. The current study supports previous research identifying the complex and challenging process that community college students embark when transferring to a four-year institution. Results suggest that students had to be persistent in order to seek out reliable sources of information and support in order to decode the complex transfer process. This study confirmed the fact that first generation college students encounter barriers in transferring from a community college to a four-year institution and their K-12 schooling impacted how they entered the community college setting.

One of the major over-arching findings of this study is that transfer for first generation college students was dependent on both traditional forms of social capital—such as access to information and support from formalized institutional resources such as an EOPS or honors program or through a trusting relationship with an individual counselor or faculty—or non-institutional resources including guidance from an older sibling and/or relying on their own research through such resources as the Assist.org database. Several students in this study navigated the transfer process with little to no support from formal campus resources, instead relying on their own online research or resources such as peers or siblings. This finding challenges Stanton-Salazar's assumption that students' only hope for navigating complex social systems like education rests in the formation of relationships with institutional agents and instead suggests that sources for

student success can be found not only in formal institutional agents but also in their family, peers and self, broadening the focus to include forms of capital that are not traditionally recognized as valuable. This study adds to the literature by demonstrating the importance of the elements of students' community cultural wealth in supporting their successful transfer to an elite four-year university. The strengths that students have honed in their home communities are critical to their persistence in an inequitable educational system.

Implications

This section includes the researcher's implications of the findings of the study presented in Chapter IV and establishes how they contribute to the literature. First, the theoretical framework will be revisited. Unlike the previous chapter, which presented findings as they relate to each research question, this section provides conclusions organized by prominent theme within each area of literature.

Theoretical Framework

Network formation and the ability and knowledge of how to interact with institutional agents are core components of Stanton-Salazar's (1997) framework. Due to the unequal distribution of opportunity and the control that social institutions such as school and government exert over access to resources, the role of institutional agents as either gatekeepers or access points for valuable capital is critical. The structural features of middle-class networks are analogous to social freeways that allow people to move about the complex mainstream landscape quickly and efficiently. In many ways, they function as pathways of privilege and power. Following this metaphor, a fundamental dimension of social inequality in society is that some are able to use these freeways,

while others are not. A major vehicle that allows for use of such freeways is an educational experience that is strategic, empowering, and network-enhancing. (Stanton-Salazar, 1997, p. 4).

While traditional social capital allows us to understand the importance of institutionally based resources that first generation students draw on in order to successfully transfer to a four-year institution, this framework does not acknowledge the strengths inherent in communities of color. Stanton-Salazar's framework places the locus of control outside of the student and positions the student's success as dependent on external resources. Yosso's (2005) theory of community cultural wealth is rooted in similar principles of social capital, however, her framework emphasizes the resources and assets that children of color leverage to successfully navigate complex social structures, including institutions of education. Yosso's (2005) concept of community cultural wealth is rooted in the recognition that the skills students of color develop in their home community are the very reasons they succeed in an inequitable and racist system.

Connecting the Literature to the Study

This study drew on the following four areas of literature: (1) Community college context; (2) First generation college students; (3) Transfer and barriers to transfer from community college to a four-year institution; and (4) Understanding transfer through the lenses of social capital and community cultural wealth. Each section synthesizes how this study contributes to the body of extant research.

Community college context

The literature about community colleges paints a bleak picture about transfer rates for students in general and for first generation students and students of color in particular.

Participants in the current study are all first generation, 75.7% surveyed are students of color, and all interview participants are students of color. Findings from the current study highlight the strategies and resources first generation students leveraged to successfully transfer from a community college to an elite four-year university. As has been demonstrated in numerous studies, the structural, information and financial barriers students often face can create a sort of vortex from which the majority of students are unable to escape.

Previous research has shown that students are often "cooled out" in an inequitable community college system that is littered with structural holes and where resources are not readily available to all students. Findings from the current study support the complexity of the transfer process and the numerous challenges students encountered. However, none of the students in my study were "cooled out" by the community college system even when they encountered resistance, misinformation or discouragement. These obstacles ranged from undocumented students receiving negative responses from campus administrators when seeking financial aid through AB540, skepticism from a counselor about a student being able to transfer in two years, or the students beginning in remedial coursework. Findings from the current study support previous research as students persisted despite obstacles because they either (1) found a supportive transfer-focused community that included reliable access to academic support and information (Hagedorn et al., 2002; Hagedorn, et al., 2004; Perna, 2000; Rowan-Kenyon et al., 2011), and an educational community that is built around high expectations (Dowd, et al., 2013; McDonough, & Nuñez, 2002); (2) they relied on information and advice from a sibling

who had already transferred to a UC (Bensimon & Dowd, 2009); or (3) found the information on their own and were primarily self-directed.

Students demonstrated high levels of navigational capital in finding resources, including EOPS and honors programs, or individual counselors or faculty who they connected with. The vast majority of students who benefitted from these sources of social capital found them on their own or learned about them through their own research. Students who relied primarily on advice and support from peers or siblings drew on rich sources of social and familial capital. Finally, students who primarily navigated the transfer process through their own research and planning embodied high levels of navigational capital.

Consistent with previous research, the students in this study enrolled in a community college for a variety of reasons. Some chose to go to community college because they believed it could help them transfer to a better school than they would have been admitted to right out of college. For some, it was the only option available after high school either because they did not get into the four-year schools they applied to or because they were effectively left without any other options because they did not have access to post-secondary planning and exploration assistance in their high school. Others who were undocumented either could not attend the four-year school they were admitted to because of restricted access to financial aid or did not apply for four-year schools because they did not think it was an option due to their immigration status. Consistent with the literature, several students conceptualized the community college as a "second chance" (Dowd et al., 2013). For some, it was a second chance at gaining entry to four-year institutions. For others, it served as sort of a re-set button for their educational

trajectory and allowed them to explore what their next step would be. For others, it was the only option available after high school in order to gain entry to a four-year institution.

Previous literature on community colleges has highlighted the negative impacts that attending community college can have on students' post-secondary educational trajectories. And while several students acknowledged these, and some were deeply impacted by the negative stigma of community college, the numerous positive aspects of attending a community college were discussed by many students as well. These included having access to smaller learning communities and the opportunity to get to know faculty and feel like they were part of a community. This experience may be more salient for students at UC Berkeley given the contrast to attending a large research university where students are often in classes with hundreds of other students. Students also emphasized the importance of being able to try out different academic interests in community college before transferring, all while saving money compared to the cost of tuition at a four-year institution.

Contrary to the majority of research on the impact of attending community colleges especially for first generation college students or students of color, attending community college either supported or increased already high aspirations for transfer. However, it was not simply from enrolling in classes that the aspirations of these students were impacted; it was from being part of transfer-focused communities, from forming mentoring relationships with either faculty or counselors and being surrounded by transfer-bound peers that their aspirations and sense of self were positively impacted. It is important to note that 12 of the 15 interview participants entered community college with transfer as their explicit goal, which has been shown in numerous studies to be

positively related to transfer (see Dougherty & Kienzl, 2006; Porchea et al., 2010; Roksa, 2006). However for many, their goals increased from aiming to transfer to a CSU to planning for a UC. For students who did not initially envision a UC as possible, finding supportive, encouraging resources, including a faculty or counselor, on their campus early in their time in community college was critical in helping them begin to envision themselves as capable of gaining admission to a top-tier research institution (Dowd et al., 2013).

The reality on many community college campuses is that these resources are not readily available for all students, and findings from the current study show that while these students found impactful resources, it was up to them to see them out. This supports Jain's (2009) findings that students are not all given access to the same information and the same support, this ranges from informational, to motivation and encouragement. For students who enter the community college setting with lowered expectations of what they are capable of and who do not find a supportive transfer community or do not encounter a faculty or counselor who takes the time to get to know them and believe in them, students may end up "under-matching" or may not transfer at all (Smith, Pender, & Howell, 2013).

Research has shown that students of color and first generation students are particularly negatively impacted by enrolling in a community college which has led some researchers to call out the "racist" nature of the system (Cohen & Brawer, 2008; Jain, 2009). Students in this study ranged in how they thought about the impact of race on their post-secondary educational journey. Participating in an EOPS program for many students served as a supportive community, where both peers and counselors shared their

struggles and how they overcame the odds themselves, and every student in that program was expected to succeed and persist. When asked about how race impacted—either positively or negatively—their educational experience, four of the interview participants said that race did not impact them. When pushed further, students sometimes speculated that it was because of their involvement with EOPS or another program where high expectations were the norm that they did not encounter discouragement related to education and their race. On the other hand, several students felt encouraged and often motivated to continue their education because of their race. Several students talked about the significance of the impact of when a counselor or faculty member shared their story about overcoming obstacles and persisting in education as a person of color. Seeing others like them persist and transfer made a significant impact on several students' experience and expectations for the future.

Students in the current study demonstrated aspirational capital in continuing their education in community colleges, enrolling with the hope and plan to transfer to a four-year institution. Students described varied levels of understanding and awareness of what it would take to transfer. But as numerous studies have shown, students need more than just high aspirations to succeed in post-secondary education, as anywhere from 50% to 80% of first-time community college students intend to transfer, depending on the study (Horn, 2009; Horn & Skomsvold, 2011; Provasnik & Planty, 2008), while the national transfer rate hovers around 25% (Wassamer et al., 2004). A significant reason students in the current study successfully transferred was because they leveraged critical forms of social capital rooted in their peer communities and through relationships with counselors and faculty. Support and encouragement from faculty and counselors often fostered

resistant capital in students, pushing them to defy expectations. This encouragement of students to dream bigger and aim higher built on already high levels of aspirational capital. Resistant capital was also fostered in students through meaningful interactions with faculty and counselors who shared their personal stories of overcoming obstacles in their path through higher education. For some students, this led to a development of a critical consciousness and transformational resistance (Solórzano & Delgado Bernal, 2001). These findings are significant, as they point to the importance of characteristics and sources of strength not traditionally recognized as reasons for student success.

First generation college students

Findings from this study support what previous research has shown, that pre-college experiences have a significant impact on post-secondary trajectory of first generation college students. While the national statistics of transfer are bleak, every single student in this study not only transferred but transferred to an elite four-year institution. The students in this study came from a variety of pre-college educational backgrounds, ranging from having access to college preparatory curriculum during high school and strong school-based infrastructure supporting four-year college pathways, to finding support for exploring four-year college options late in high school, to having little or not post-secondary exploration and preparation support in their high school. For the students who entered community college with an awareness of capital-rich resources such as transfer-focused programs and were proactive about seeking out these support structures after attending a high school that intentionally prepared students for post-secondary education, the transition into honors or EOPS programs was more seamless. This finding supports previous research showing that awareness of transfer requirements

before entering community college impacts students' perception of resources available on campus (Hagedorn et al., 2004). Students who did not have access to college preparatory curriculum either in their high school or through a TRIO program encountered more obstacles in the process of finding the resources that ultimately made the most impact on their transfer. These students either found a counselor after being persistent and seeking out multiple sources of information, formed a mentoring relationship with a faculty whose class they enrolled in, or someone happened to overhear them talking about wanting to go to Berkeley.

Findings from this study support previous research that first generation college students benefit greatly from structured support and access to reliable information when they enter the community college system. The benefit that students gained from such resource-rich forms of capital as EOPS or honors cannot be overstated. These programs provided students with a single touch-point of reliable, trusted information and access to an adult mentor who provided information, encouragement and motivational support. These elements have been shown through numerous studies to be some of the most critical elements in successful transfer (see Hagedorn and Cepeda, 2004; Hagedorn et al., 2002; Hagedorn et al., 2006). Students not connected with campus-based programs often had to sift through information provided by multiple sources including counselors, faculty or online, and demonstrated a high level of navigational capital in determining what information to trust. Students often described how they opted not to follow advice from formal institutional resources, actively questioning information they received and instead planning their pathway to transfer on their own. This embodies the concept of "cultural mistrust" (Grier & Cobbs, 1968), where traditionally marginalized populations

embody mistrust as both a defense mechanism and a form of empowerment when navigating an inequitable social system.

What the findings from the current study add to the literature is a recognition of the value of such forms of community cultural wealth as navigational, social and familial capital and how these forms of capital help balance or outweigh the students' often missed opportunities they experienced in K-12 education. Every student in this study demonstrated savvy navigational ability in a complex and porous system. Students drew on support through social networks of transfer-bound students as well as relationships with faculty and counselors. For students who had older siblings who had previously transferred from a community college to a four-year institution, these family members were a rich source of social and familial capital.

Transfer and barriers to transfer from community college to a four-year institution

All students in this study faced a combination of personal and institutional barriers when entering the community college system. Students often had to seek out multiple sources of information and actively pursue rich sources of transfer support. Several students faced financial barriers, and the length of time they spent in community college before transferring was impacted by factors including finances and family responsibilities. Previous research has shown that particular institutional practices such as the availability of high-touch resources focused on transfer—including EOPS, honors, Puente, etc.—increase the likelihood of transfer for traditionally under-represented students. Entering community college with an awareness of transfer as a possibility and with transfer as a clear goal has been shown in previous research to positively impact transfer. Results from the current study support the importance of access to information

early from reliable sources of information as well as the positive impact of being involved with a transfer community infused with high expectations in the persistence and transfer of traditionally under-represented students (Crisp & Nunez, 2014; Haberler & Levin, 2014; Hagedorn & Cepeda, 2004; Ornelas & Solórzano, 2004; Haberler & Levin). It is important to note that the majority of students in this study avoided two of the major pitfalls that community college students commonly face: being tracked toward vocational programs and starting in remedial education. Numerous studies (see Dougherty & Kienzl, 2006; Gándara et al., 2012; Hagedorn et al., 2004; Ornelas & Solórzano, 2004; Villalpando, 2004) have shown that these two elements are the most damaging in the path toward transfer for students of color and first generation students. It is important to note that four interview participants started in at least some remedial courses and two students started in technical community colleges, which had a more vocational focus. Both of these students transferred to a different community college that better supported transfer.

Findings from the current study both support and challenge Crisp and Nunez's (2014) findings. The experience of several students mirrored the best practice recommendations of Crisp and Nunez (2014)—they worked closely with a "transfer agent" (Dowd et al., 2006) had access to a "transfer culture" that promote transfer for students of color (Ornelas & Solórzano, 2004), and were part of campus-based programs with a climate that promoted a sense of "belonging" and high expectations for students of color (Gándara et al., 2012). Students who were part of a campus-based community such as EOPS or honors offered numerous examples of the powerful "validation" they experienced in working with a counselor or faculty member (Rendón, 1994). From the student perspective, however, there was not a uniform and institutionalized access point

for these resources. Students who were part of EOPS or honors programs described being part of a structured, institutionally supported community that emphasized transfer. There were other students, however, who found these research-based, high-impact elements a la carte—through relationships with different individuals on campus or in their home communities. Still, there were others who did not belong to a transfer community and did not have a significant relationship with any administrator and navigated the transfer process with the support of a sibling or peers, or on their own using the Assist.org database. What the findings from the students who were not involved with an institutionally-based transfer focused program point to is the significance of the elements of community cultural wealth such as navigational capital and resistant capital, elements that have not been widely recognized in extant literature and have not been traditionally captured in quantitative research utilizing large national datasets such as Crisp and Nunez (2014).

An overarching theme from the current study is that rich sources of capital shown to be critical in transfer are not equitably structured and may not even be formally institutionalized, in the case where individual faculty and counselors are doing the work in one-on-one settings. This finding supports Jain's (2009) critique of the community college system in that not all students are given the necessary information to prepare for transfer eligibility. Previous research has shown that when first generation students establish a trusted relationship with a transfer agent, it is often haphazard, serendipitous, or accidental (Bensimon & Dowd, 2009; Dowd et al., 2006). Findings from Bensimon & Dowd (2009) and Dowd et al., (2006) underscore this point and emphasize the importance of institutional agents proactively reaching out to students so that not only the

proactive students have the opportunity to transfer. The reality is that not every student knows what questions to ask, not every student feels confident proactively seeking out support from institutional agents, and not every student can be on campus during business hours to meet with a counselor due to work and family responsibilities. While campuses may have high transfer rates, some students in the currently study shared their perception that not all student populations are encouraged to pursue the necessary coursework and are given the information early on to set that plan in motion. Some students in the current study acknowledged that transfer resources on their campus seemed to be clustered within certain areas of campus and that not all students had equal access to these resources or were encouraged in the same way to transfer. Quantitative data from the current study shows that 54.8% of students indicated "strongly agree" or "agree" when asked if their community college expected students to transfer. The other 44.3% either selected: "neither agree" or "disagree," or "strongly disagree" that their campus expected students to transfer.

Findings from Ornelas & Solórzano (2004) highlight the importance of the campus priorities and how programs are funded and what are deemed as important, how student support is structured and how it is communicated to students. Not only do Ornelas and Solórzano (2004) emphasize the importance of campuses investing in resource-rich programs for students of color such as EOPS, the authors also acknowledge that students need to be aware that resources exist and understand that transfer is an option. The reality of community college campuses is that resources are over-stretched and under-funded, leaving community college counselors and administrators struggling to meet the needs of an increasing student population (Hagedorn et al., 2002; Hagedorn et al., 2004).

A critical take-away from the current study is that students found resources because they were persistent and resilient. Students who attended community college where transfer was not widely expected still transferred, demonstrating strong resistant, navigational capital, supporting previous research that students who successfully navigate the transfer process are especially resilient (Lee, Mackie-Lewis, & Marks, 1993). And while the students in the current study did transfer, how many students with equal potential did not transfer because they were not persistent in seeking resources, validating information by accessing numerous resources, or finding a supportive community within their school that focused on transfer preparation?

Several students looked outside formal in-person campus resources and opted instead to rely on information from peers, siblings or the Assist.org statewide database of transferrable courses. Embedded within this finding are issues of trust, which students sometimes articulated but other times only inferred. Many students expressed that they felt that it was "up to them" to find resources and to find someone they could trust or had someone they already trusted, most often a sibling or a friend. This finding is hopeful because these students successfully navigated a system not designed or funded for their success, and they succeeded despite the institutional roadblocks and structural holes because of their high level of navigational capital and resistant capital. On the other hand, this finding is troubling because these students did not feel they could rely on the system to help them. It is important to carefully consider the implications of the fact that community college counselors are the most frequently cited source of information for transfer according to the quantitative results, yet from the qualitative data, students repeatedly expressed a distrust of information from such resources, even avoiding going

to general counselors altogether. This even more points to the fact that in order for students to successfully transfer, they cannot solely rely on formal institutional sources for information, and that students have to question and be persistent and go to multiple resources. Previous research shows that first generation college students rely more heavily on institutional resources to navigate and plan for post-secondary education. However, this study's findings suggest that in order to transfer, students need to persistently seek out multiple sources of information in order to transfer.

Understanding transfer through the lenses of social capital and community cultural wealth

Students shared a number of examples of the life-changing impact that institutional agents had on their educational trajectory. Following Stanton-Salazar's (2011) definition of "institutional agent" these faculty or counselors provided students with authentic and caring support for students, serving as a bridge from one opportunity to another and through advocacy, role modeling, personalized feedback and guidance through the transmission of institutional funds of knowledge (Bensimon, & Dowd, 2009). This was evident in the faculty and counselors who encouraged students to aim higher and apply for UC schools, who connected students with outside organizations such as The Center for Community College Partnerships, Fly to Berkeley, the Cal Summer Experience, or simply encouraged the student to believe in themselves through providing validation and encouragement in developing a scholar identity—healing the damage that many students had endured in a neglectful or sometimes hostile pre-college education system.

Participation in either an EOPS or honors program was especially significant for several participants. These institutionalized programs not only provided access to a small community of transfer-bound students, advising from trusted counselors at regular intervals, assistance exploring and evaluating four-year institutions and often access to priority class registration, students were able to tap into a source of reliable and accurate information regarding transfer requirements which research has shown is one of the biggest hurdles to transfer (Hagedorn & Cepeda, 2004). These programs also served as connective tissue to vital sources of capital through other programs, which supports what has been found in previous research (Hagedorn & Cepeda, 2004). Some students also had the opportunity to participate in campus visits and other co-curricular opportunities such as research conferences that gave them the opportunity to develop their identity as a scholar.

Stanton-Salazar (1997) holds that one of the most powerful ways of accessing networks of power and privilege are through an education that is strategic, empowering and network enhancing. For students in this study, empowering resources such as EOPS and honors programs, as well as individual faculty and counselors effectively served as on-ramps to the freeway that White, middle class students have been driving on their whole lives. While the impact and importance of access to information and supportive transfer agents cannot be overstated, the findings from this study also highlight the importance of students' community cultural wealth in supporting successful transfer. The findings from this study continue the conversation started by such studies as Ramirez (2011), Yeung (2011) and Martin (2014) in recognizing the power of community cultural wealth in supporting a student's post-secondary journey and expanding on the findings

from such studies as Jayakumar et al (2013), which established the importance of community cultural wealth in the conceptualization of a humanizing college preparation process for students of color.

One of the richest forms of capital for students' transfer preparation were from non-formal resources or institutional resources such as faculty or counselors who were going above and beyond their formal job description. Often the faculty and counselors who made biggest impact on students' lives did so through work outside of their formal job description through infusing their teaching or practice to help students develop a critical consciousness (Gutiérrez, Baquedano-López & Tejeda, 1999). In the qualitative data, some students discussed the development of a critical consciousness during their time in community college and the impact that this awareness had on increasing their motivation and infusing the continuation of their post-secondary education infused with a mission of social justice. Working closely with a faculty or counselor who acknowledged the barriers students faced in transferring and challenged the students to overcome the odds and challenge the system were particularly impactful for four students. For the undocumented students in this study, developing a critical consciousness and demonstrating transformative resistance was something that happened because of the barriers they were forced to navigate based on their immigration status. Students described elements of transformative resistance (Solórzano & Delgado Bernal, 2001) and while for some students, the impetus for this development came from being exposed to curriculum or teachings from an external source in an educational setting, for the undocumented students, their critical consciousness developed as a result of navigating complex social and educational barriers as a part of daily life.

Similar to the findings of Jayakumar et al. (2013), the support drawn from the specialized programs, faculty or counselors strengthened existing transfer aspirations or in the case where transfer was not the clear initial goal, influenced the development of that aspiration. Before encountering the faculty or counselor, each student had the goal of transferring to a four-year school. However, for some students, after developing an awareness of the inequities within the post-secondary educational system and a deeper understanding of the importance of continuing their education to at least a bachelor's degree as a student of color, this fueled their persistence and led to the development of a more culturally relevant, mission-driven scholar identity. The majority of students who expressed an awareness of educational inequalities that impact students of color also expressed a strong desire to change the system so that others, often their younger family members, did not have to struggle the same way they did. Through supportive interactions with trusted administrators, students began to envision themselves as not just four-year college students but scholars, capable of excelling at an elite research institution and making a change in the broader social and educational systems.

Conclusions

Major findings from this study both validated previous research as well as contributed to the body of literature addressing the experiences of first generation college students who transferred to a selective four-year university from a community college. Findings from this study indicated that students had high educational aspirations, with the majority of participants having always planned on going to college. While the majority of students had support and encouragement from their families, in order to successfully

transfer to a four-year institution, students had to acquire support and information from formal institutional resources as well as informal resources.

The students included in this study attended community colleges throughout the state of California and had varying levels of access to reliable information sources embedded within their school's infrastructure. For students who were plugged into either an EOPS or honors program, they were able to access high levels of social capital which significantly impacted an increase of their aspirations as well as supported their exploration of options in a structured, encouraging and validating way. These programs also gave students access to a rich community of transfer students. Students who were not part of either an EOPS or honors program, either formed relationships with individual faculty or counselors who provided some of the same support or primarily relied on information and support from an older sibling. There was another sub-set of the population who for the most part navigated the transfer process on their own, relying on the Assist.org database and their own research and planning. Students in this study demonstrated a high level of navigational capital. Some students were further supported by high levels of social capital through belonging to a specialized campus program. All students demonstrated resistant capital, simply through persisting in a sometimes hostile, complex and unfriendly transfer process. For some students, this resistance extended into transformative resistance through the development of a critical consciousness. This critical consciousness became a significant motivation for these students, as the awareness of social and educational inequities was a major driver in their persistence through community college and in transferring to Berkeley.

These findings demonstrate the inequitable distribution of resources within and between community colleges, where students cannot reliably enter an institution and be guaranteed to access rich sources of social capital. The majority of students described finding the resource that was most significant for them through a non-systematic pathway: they happened to meet a counselor, they signed up for a particular class and ended up getting to know that faculty, they did their own research and sought out either EOPS or honors programs. These students were successful because they were persistent and demonstrated high levels of navigational capital, continuing to seek out information either on their own or through a different campus resource even when they were given incorrect or discouraging information initially. These students did not let the pattern of low transfer rates for community college students deter them from continuing to follow the transfer pathway. Instead of first generation students being painted with a broad brush of deficiencies and short-comings, what this data tells us is that first generation students are strong, savvy and resilient in the face of odds that are stacked against them. Learning from the lived experience of first generation college students, especially those who persist and transfer from a community college to a selective four-year institution, is critical for policy and program development in order to be able to better serve this growing student population.

Recommendations

This final section offers recommendations for future research and for practice based upon the study's findings. Recommendations for practice will be discussed, followed by implications for research.

Recommendations for Practice

The findings from this study underscore what has been shown to be important for first generation college students in successfully transferring from a community college to a four-year institution. Following are recommendations for practice based on results from the current study.

- A series of workshops and/or trainings should be developed with the goal of expanding the dialogue around transfer preparation and how to better support and serve first generation college students enrolled in community colleges. The workshops could include three iterations presented to three different groups of stakeholders—(1) community college faculty and counselors, (2) community college students and (3) admissions and outreach staff at four-year institutions. The over-arching goal for each session will be to highlight the factors that this study demonstrated as key for students' successful transfer to a four-year institution with an emphasis on the elements of community cultural wealth. For community college faculty and counselors, the importance of their role in the formation and support of transfer aspirations and connecting students with resources and opportunities to explore transfer pathways is a key element to highlight. For students, the importance of their strengths, resilience and resistance rooted in their home communities and within themselves would be emphasized, as this is a factor that receives little attention in the dominant narrative around transfer for first generation college students. For four-year representatives, the session would be infused with the importance of connecting to potential transfer

students and encouraging a holistic review of a student's candidacy for admission beyond the standard academic measures.

- Community colleges need to review the availability—both actual and perceived—of resources that have been shown to make the biggest impact in supporting transfer. Campuses should evaluate how resources are communicated, including who the communication targets. All students should have the opportunity to access rich sources of capital from faculty and counselors; it should not just be available to the students who proactively seek it out.
- Extending the type of support students accessed in honors or EOPS programs to a wider student body—including consistent, reliable, structured advising and a membership in a transfer-focused community of peers—so that not just the students who participate in those programs benefit from these practices that research has shown to be so important for encouraging transfer.
- Capitalizing on the power of peer networks. Research has shown that it is challenging to reach students with important information or make resources available to all students due to cuts in funding, scheduling constraints or students' outside responsibilities. How can students act as ambassadors of information for their fellow students?
- Development and adoption of curriculum that intentionally addresses and recognizes the value of forms of community cultural wealth, building on the work of Martin (2014) which focuses on the impact of exposing students of color to curriculum designed to raise their awareness about social capital and community cultural wealth in order to help students recognize their inherent strengths.

- Resistant capital and developing a critical consciousness provided many students in this study with an additional level of motivation to persist when encountering various obstacles. If policymakers and administrators know that the majority of community college students are first generation and traditionally under-represented minority students, then practices that have been shown to be particularly impactful in transfer for these student populations should be institutionally recognized and funded.
- Four-year institutions must be more actively involved in outreach to community college students and support students' opportunity to visit their campuses and interact with members of the university campus community. Without this type of exposure, elite four-year institutions like Berkeley stand to miss out on potential scholars who may not have otherwise envisioned themselves there.
- If the majority of students are seeking information about transfer online, with some students even navigating the entire process through their own online research, how can institutions provide richer web-based resources for students that extend beyond just the articulation of transfer requirements? Given the funding shortage for campus-based resources, how can campuses better connect with students via online communications and modules?

Recommendations for Research

This study explored what resources first generation students leveraged to support transfer from a California community college to an elite four-year institution. This is a small study, so the research and practice communities would benefit from continued exploration.

Multiple Institutions

This study focused on students who had successfully transferred to Berkeley. Therefore it is recommended that future studies explore similar questions with a larger sample size including multiple institutions. Researchers can investigate differences between types of four-year institutions, for instance, do students who transfer to small liberal arts schools differ from those who transfer to large research universities? Research could also explore whether there are differences beyond traditional definitions of academic achievement (i.e. GPA, standardized test scores) between students who transfer to an elite four-year school versus a less selective school, including the elements of community cultural wealth identified in the current study.

Expand on Quantitative Methodology and Comparative Studies

Using a larger sample size, and one that may draw from multiple institutions, further analysis can be done with the quantitative instrument developed for the current study. In using a larger sample size, it would be useful to examine whether differences exist in the types of resources that student leverage to support transfer based on gender, age, race/ethnicity, and first generation versus non-first generation students.

Concluding Remarks

I embarked on this dissertation process with a commitment to research as advocacy. When I began my doctoral education, I knew I wanted my dissertation to be connected to an issue that matters, something that I am not only passionate about but that is important from a social justice standpoint in the broader educational context. I knew I wanted to challenge the dominant narrative and highlight the strengths and assets of traditionally under-represented students whose stories are not often told. Finding the

right topic for my dissertation was a journey in itself. I went through several iterations and considered different settings, and yet through each shift of my topic, I remained focused on my initial goal for my doctoral education.

In beginning my research and formulating plans for data collection, I wrestled with different tensions. As a White woman, and a non-first generation college student, I knew that I would be seen as an outsider by many when approaching different student groups and campus partners during data collection and when talking about my research. I knew that in order to gain the trust of campus colleagues and ultimately potential student participants, I needed to embrace this tension and sometimes sit with discomfort when people questioned why I was interested in this topic and what brought me to my research. With the research I planned to engage in, I knew I needed to be prepared, well read and to have done the work in myself to prepare me as a researcher and as a person to broach topics of structural inequality and the ways that race impacts access to education. It is because I had the opportunity to learn from such critical scholars at USF as Dr. Uma Jayakumar and Dr. Patrick Camangian that I felt prepared to do the research study I undertook.

In collecting data for my study, I was struck by the amount of support I received from colleagues across campus and the interest that students expressed in participating. At a large institution such as UC Berkeley, students can often feel like a number, and transfer students often feel othered because they did not enter Berkeley as a freshman. In learning about their stories and the massive odds these students have overcome to reach an institution like Berkeley, it further motivates me to continue my work in supporting transfer students and connecting with campus outreach efforts with potential transfer

students. Being entrusted with these students' stories has also influenced me in speaking up more in my department when it comes to transfer students and advocating for more support and outreach for this student population. Since my dissertation research has concluded, I have partnered with several of my participants to create an outreach communication campaign for incoming students to help provide more information to incoming transfer students.

There is so much more work to be done in improving the transfer rate for first generation college students. The population of students whom I worked with for this study make up a very small percentage of transfer-bound students in general. The persistence, resistance and resilience that these students demonstrated is incredible. Throughout my data collection, I kept thinking about all of the students who may have the same potential as these students but who never got the opportunity to transfer because they were not as persistent or did not find the right person to connect with at their community college or ran out of patience or money before they were able to successfully transfer. The work that needs to be done is reaching more students, either through faculty and counselors, through peer mentors, or through providing resources online for students to access in their own time. Transfer cultures on community college campuses need to be better supported so that transfer is an obvious choice for students and so students know who to talk to and what to do in order to assess their path and evaluate how to move toward transfer. Counselors and faculty must also recognize the community cultural wealth that students bring with them to campus and encourage students to draw on these strengths in their path toward transfer. The potential of first generation college students

is infinite. We as educators must do everything we can to support their pathway through post-secondary education.

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APPENDICES

Appendix A: Transfer Student Survey

Student Access to Resources

1. Please indicate whether the following resources were AVAILABLE to you at your community college:

	Yes (1)	No (2)	I don't know (3)
Community college counselor (1)	❍	❍	❍
Specialized program counselor (i.e. Puente, EAOP, MESA, RISE, TAP, honors program) (2)	❍	❍	❍
Transfer center (3)	❍	❍	❍
Faculty/instructor (4)	❍	❍	❍
Special course, seminar or workshop focused on transfer preparation (5)	❍	❍	❍
Transfer event on community college campus (6)	❍	❍	❍
Representative from a 4-year institution (i.e. admissions, outreach staff, student organization representative) (7)	❍	❍	❍

2. Please indicate how often you USED the following resources at your community college for any purpose related to transfer:

	Never (1)	Rarely (2)	Occasionally (3)	A moderate amount (4)	A great deal (5)	Prefer not to answer (6)
Community college counselor (1)	❍	❍	❍	❍	❍	❍
Specialized program counselor (i.e. Puente, EAOP, MESA, RISE, TAP, honors program) (2)	❍	❍	❍	❍	❍	❍
Transfer center (3)	❍	❍	❍	❍	❍	❍
Faculty/instructor (4)	❍	❍	❍	❍	❍	❍
Special course, seminar or workshop focused on transfer preparation (5)	❍	❍	❍	❍	❍	❍
Transfer event on community college campus (6)	❍	❍	❍	❍	❍	❍
Representative from a 4-year institution (i.e. admissions, outreach staff, student organization representative) (7)	❍	❍	❍	❍	❍	❍

3. Are there other resources other than those listed above that you utilized to support your transfer to UC Berkeley? If you prefer not to answer, enter N/a.

_____

4. The following is a list of resources that community college students sometimes use when they are seeking to transfer to a 4-year school. Please review each one carefully and then respond with your level of agreement with this statement: The following resources provided me with INFORMATION about transfer eligibility for transferring to a 4-year school.

	Strongly Disagree (1)	Disagree (2)	Neither Agree or Disagree (3)	Agree (4)	Strongly Agree (5)	Prefer Not to Answer (6)
Community college counselor (1)	❍	❍	❍	❍	❍	❍
Specialized program counselor (i.e. Puente, EAOP, MESA, RISE, TAP, honors program) (2)	❍	❍	❍	❍	❍	❍
Transfer center (3)	❍	❍	❍	❍	❍	❍
Faculty/instructor (4)	❍	❍	❍	❍	❍	❍
Special course, seminar or workshop focused on transfer preparation (5)	❍	❍	❍	❍	❍	❍
Transfer event on community college campus (6)	❍	❍	❍	❍	❍	❍
Representative from a 4-year institution (i.e. admissions, outreach staff, student organization representative) (7)	❍	❍	❍	❍	❍	❍
Visiting a 4-year institution (8)	❍	❍	❍	❍	❍	❍
Parents (9)	❍	❍	❍	❍	❍	❍
Siblings (10)	❍	❍	❍	❍	❍	❍
Friends (11)	❍	❍	❍	❍	❍	❍

5. The following is a list of resources that community college students sometimes use when they are seeking to transfer to a 4-year school. Please review each one carefully and then respond with your level of agreement with this statement: The following resources provided me with MOTIVATION and/or ENCOURAGEMENT to transfer to a 4-year school.

	Strongly Disagree (1)	Disagree (2)	Neither Agree or Disagree (3)	Agree (4)	Strongly Agree (5)	Prefer Not to Answer (6)
Community college counselor (1)	❍	❍	❍	❍	❍	❍
Specialized program counselor (i.e. Puente, EAOP, MESA, RISE, TAP, honors program) (2)	❍	❍	❍	❍	❍	❍
Transfer center (3)	❍	❍	❍	❍	❍	❍
Faculty/instructor (4)	❍	❍	❍	❍	❍	❍
Special course, seminar or workshop focused on transfer preparation (5)	❍	❍	❍	❍	❍	❍
Transfer event on community college campus (6)	❍	❍	❍	❍	❍	❍
Representative from a 4-year institution (i.e. admissions, outreach staff, student organization representative) (7)	❍	❍	❍	❍	❍	❍
Visiting a 4-year institution (8)	❍	❍	❍	❍	❍	❍
Parents (9)	❍	❍	❍	❍	❍	❍
Siblings (10)	❍	❍	❍	❍	❍	❍
Friends (11)	❍	❍	❍	❍	❍	❍

Barriers to Transfer and Student Resilience

6. The following statements refer to the influence that your family, community and school may have had in your navigation of the transfer process from community college to a 4-year school. Please review each one carefully and then respond with your level of agreement with each statement:

	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree	Prefer Not to Answer
My family's emotional support and encouragement helped me transfer to a 4-year university	❍	❍	❍	❍	❍	❍
Earning a bachelor's degree will help me give back to my community, and this motivated me to transfer to a 4-year school.	❍	❍	❍	❍	❍	❍
My family values higher education, which motivated me to pursue a bachelor's degree	❍	❍	❍	❍	❍	❍
My involvement with a community organization (i.e. church, non-profit organization, mentoring) encouraged me to transfer to a 4-year university.	❍	❍	❍	❍	❍	❍
The support and encouragement from my friends in my home community helped me transfer to a 4-year institution.	❍	❍	❍	❍	❍	❍
The support and encouragement from my adult mentor helped me transfer to a 4-year university.	❍	❍	❍	❍	❍	❍
My community college counselor's expectations for my future encouraged me to transfer to a 4-year school.	❍	❍	❍	❍	❍	❍
My community college faculty/instructors' expectations for my future encouraged me transferring to a 4-year school.	❍	❍	❍	❍	❍	❍
Students at my community college were expected to transfer to a 4-year school.	❍	❍	❍	❍	❍	❍

Please indicate your level of agreement with the following statements:

7. I navigated the technical aspects of applying to a 4-year school by seeking resources that weren't readily available.
- ❍ Strongly Disagree (1)
- ❍ Disagree (2)
- ❍ Neither Agree nor Disagree (3)
- ❍ Agree (4)
- ❍ Strongly Agree (5)
- ❍ Prefer Not to Answer (6)

8. My family relies on me as a primary translator from English to another language.
- ❍ Strongly Disagree (1)
- ❍ Disagree (2)
- ❍ Neither Agree nor Disagree (3)
- ❍ Agree (4)
- ❍ Strongly Agree (5)
- ❍ Prefer Not to Answer (6)
- ❍ Not Applicable (7)

9. I use different ways of communicating (i.e. language, phrasing, style of speech) with people in the college environment than in my home community.
- ❍ Strongly Disagree (1)
- ❍ Disagree (2)
- ❍ Neither Agree nor Disagree (3)
- ❍ Agree (4)
- ❍ Strongly Agree (5)
- ❍ Prefer Not to Answer (6)

10. Counselors, teachers or other school administrators in my HIGH SCHOOL did not expect me to go to a 4-year institution, which has made me determined to pursue a bachelor's degree.
- ❍ Strongly Disagree (1)
- ❍ Disagree (2)
- ❍ Neither Agree nor Disagree (3)
- ❍ Agree (4)
- ❍ Strongly Agree (5)
- ❍ Prefer Not to Answer (6)

11. Counselors, faculty or other school administrators in my COMMUNITY COLLEGE did not expect me to go to a 4-year institution, and have I used this as motivation to pursue a bachelor's degree.

- ❍ Strongly Disagree (1)
- ❍ Disagree (2)
- ❍ Neither Agree nor Disagree (3)
- ❍ Agree (4)
- ❍ Strongly Agree (5)
- ❍ Prefer Not to Answer (6)

12. The guidance, mentoring and academic support I received from participating in a program such as EOPS, MESA, Puente, or honors played a significant role in my successful transfer to a 4-year school.

- ❍ Strongly Disagree (1)
- ❍ Disagree (2)
- ❍ Neither Agree nor Disagree (3)
- ❍ Agree (4)
- ❍ Strongly Agree (5)
- ❍ I did not participate in any of these programs (6)
- ❍ Prefer Not to Answer (7)

13. The hardships I have experienced in my family have motivated me to pursue a bachelor's degree.

- ❍ Strongly Disagree (1)
- ❍ Disagree (2)
- ❍ Neither Agree nor Disagree (3)
- ❍ Agree (4)
- ❍ Strongly Agree (5)
- ❍ Prefer Not to Answer (6)

14. Knowing someone else from my community (i.e. friend, sibling) who transferred to a 4-year school helped me believe I could transfer too.

- ❍ Strongly Disagree (1)
- ❍ Disagree (2)
- ❍ Neither Agree nor Disagree (3)
- ❍ Agree (4)
- ❍ Strongly Agree (5)
- ❍ Prefer Not to Answer (6)

15. Being part of a community of peers in my community college who were also working toward transferring helped motivate and support me in preparing to transfer.

- ❍ Strongly Disagree (1)
- ❍ Disagree (2)
- ❍ Neither Agree nor Disagree (3)
- ❍ Agree (4)
- ❍ Strongly Agree (5)
- ❍ Prefer Not to Answer (6)

16. While in community college, I sought out multiple resources related to transfer requirements to ensure that I remained transfer eligible.

- ❍ Strongly Disagree (1)
- ❍ Disagree (2)
- ❍ Neither Agree nor Disagree (3)
- ❍ Agree (4)
- ❍ Strongly Agree (5)
- ❍ Prefer Not to Answer (6)

17. In order to pay for school, I have worked while taking classes which has required me to balance both work and school.

- ❍ Strongly Disagree (1)
- ❍ Disagree (2)
- ❍ Neither Agree nor Disagree (3)
- ❍ Agree (4)
- ❍ Strongly Agree (5)
- ❍ Prefer Not to Answer (6)

The following three questions refer to your experience as a student at UC Berkeley. Please indicate your level of agreement with each statement.

18. The navigational skills I used to transfer are useful for me in finding out what I need to do to succeed at UC Berkeley.

- ❍ Strongly Disagree (1)
- ❍ Disagree (2)
- ❍ Neither Agree nor Disagree (3)
- ❍ Agree (4)
- ❍ Strongly Agree (5)
- ❍ Prefer Not to Answer (6)

19. The hardships I have overcome in my life motivate me to persist and graduate from UC Berkeley.

- ❍ Strongly Disagree (1)
- ❍ Disagree (2)
- ❍ Neither Agree nor Disagree (3)
- ❍ Agree (4)
- ❍ Strongly Agree (5)
- ❍ Prefer Not to Answer (6)

20. Finding a support network at UC Berkeley (i.e. student club, EOP, academic department/major) has been an important reason for my success at UC Berkeley.

- ❍ Strongly Disagree (1)
- ❍ Disagree (2)
- ❍ Neither Agree nor Disagree (3)
- ❍ Agree (4)
- ❍ Strongly Agree (5)
- ❍ Prefer Not to Answer (6)

21. Please use the space provided to address anything additional that you would like to share - related to your educational goals, influential sources/people, and your transfer preparation experience:

_____

_____

DEMOGRAPHICS

22. What is your gender?

- ❍ Male (1)
- ❍ Female (2)
- ❍ Other (3)
- ❍ Prefer not to answer (4)

23. What ethnicity are you (Please check all that apply):

- ❑ African American/Black (1)
- ❑ American Indian (2)
- ❑ Arab American (3)
- ❑ Caucasian (4)
- ❑ Chinese (5)
- ❑ Filipino (6)
- ❑ Japanese (7)
- ❑ Korean (8)
- ❑ Vietnamese (9)
- ❑ Other Asian (please specify) (10)
- ❑ Mexican/Chicano (11)
- ❑ Puerto Rican (12)
- ❑ Central American (13)
- ❑ Cuban (14)
- ❑ South American (15)
- ❑ Other Hispanic/Latino (please specify) (16)
- ❑ Other (17)
- ❑ Prefer not to answer (18)

24. Age Range

- ❍ Under 19 years (1)
- ❍ 19-22 (2)
- ❍ 22-25 (3)
- ❍ 26 years or older (4)
- ❍ Prefer not to answer (5)

25. What is your best estimate of your parents' or total household income last year (2014)? Please consider income from all sources before taxes (Mark one only)

- ❍ Less than $6,000 (1)
- ❍ $6,000 to $24,999 (2)
- ❍ $25,000 to $43,999 (3)
- ❍ $44,000 to $69,999 (4)
- ❍ $70,000 to $149,999 (5)
- ❍ $150,000 or more (6)
- ❍ Prefer not to answer (7)

26. Before transferring to UC Berkeley, I attended community college:

- ❍ Full time (12 or more credits per semester) (1)
- ❍ Part time (less than 12 credits per semester) (2)
- ❍ Prefer not to answer (3)

27. Before transferring to UC Berkeley, I worked outside of school:

- ❍ Full time (40 hours/week) or full-time equivalent (1)
- ❍ Part time (2)
- ❍ Did not work (3)
- ❍ Prefer not to answer (4)

28. Before transferring to UC Berkeley, I attended community college for ___ semesters (please indicate number of Fall or Spring semesters only):

- ❍ 2-4 semesters (1)
- ❍ 5-6 semesters (2)
- ❍ 7+ semesters (3)
- ❍ Prefer not to answer (4)

29. Before transferring to UC Berkeley, I attended ____ community college(s):

- ❍ 1 (1)
- ❍ 2 (2)
- ❍ 3 or more (3)
- ❍ Prefer not to answer (4)

30. UC Berkeley is the first 4-year university I have attended:

- ❍ Yes (1)
- ❍ No (2)
- ❍ Prefer not to answer (3)

31. This is my ___ semester at UC Berkeley

- ❍ 1st (1)
- ❍ 2nd (2)
- ❍ 3rd (3)
- ❍ 4th (4)
- ❍ 5th or more (5)
- ❍ Prefer not to answer (6)

32. My last semester at a California community college before transferring to UC Berkeley was (semester, year). If you prefer not to answer, enter n/a.

33. At which California community college did you complete the majority of your transferrable units. If you prefer not to answer, enter n/a.

34. My intended or declared major at UC Berkeley is: If you prefer not to answer, enter n/a.

35. Please indicate the type of financial aid you received while enrolled in community college (Check all that apply):

- ❑ None (1)
- ❑ Cal Grant (2)
- ❑ College work study (3)
- ❑ EOPS Grant (4)
- ❑ Pell Grant (federal) (5)
- ❑ Student loans (6)
- ❑ Scholarships (7)
- ❑ GI Bill (8)
- ❑ Other (please specify): (9) _____
- ❑ Prefer not to answer (10)

36. Were you born in the US?

- ❍ Yes (1)
- ❍ No (2)
- ❍ Prefer not to answer (3)

37. What is your father's highest level of education?

- ❍ Grammar school or less (1)
- ❍ Some high school (2)
- ❍ High school graduate (or GED equivalent) (3)
- ❍ Postsecondary school other than college (4)
- ❍ Some college (5)
- ❍ College degree outside of the US (6)
- ❍ College graduate (7)
- ❍ Some graduate school (8)
- ❍ Graduate degree (9)
- ❍ Unknown (10)
- ❍ Prefer not to answer (11)

38. What is your mother's highest level of education?

- ❍ Grammar school or less (1)
- ❍ Some high school (2)
- ❍ High school graduate (or GED equivalent) (3)
- ❍ Postsecondary school other than college (4)
- ❍ Some college (5)
- ❍ College degree outside of the US (6)
- ❍ College graduate (7)
- ❍ Some graduate school (8)
- ❍ Graduate degree (9)
- ❍ Unknown (10)
- ❍ Prefer not to answer (11)

39. What is the highest level of education completed by any of your siblings?

- ❍ I don't have any siblings (1)
- ❍ Grammar school or less (2)
- ❍ Some high school (3)
- ❍ High school graduate (or GED equivalent) (4)
- ❍ Postsecondary school other than college (5)
- ❍ Some college (6)
- ❍ College degree outside of the US (7)
- ❍ College graduate (8)
- ❍ Some graduate school (9)
- ❍ Graduate degree (10)
- ❍ Unknown (11)
- ❍ Prefer not to answer (12)

40. Is English your first language?

- ❍ Yes (1)
- ❍ No (2)
- ❍ Prefer not to answer (3)

41. What is your marital status?

- ❍ Single (1)
- ❍ Married/domestic partnership (2)
- ❍ Other (3)
- ❍ Prefer not to answer (4)

42. Do you have children?

- ❍ Yes (1)
- ❍ No (2)
- ❍ Prefer not to answer (3)

Appendix B: Student Interview Questions

I. College Aspirations, Educational Goals and Expectations

1. When did you come to the realization that you wanted to go to college?

2. Do you think others have always expected you to go or not to go to college? (probe for family, teachers, counselors, peers). In your response, please do not provide any names of other individuals, or describe others in such a way that it would be possible to identify them.
    a. How has this impacted your motivation for pursuing a Bachelor's degree?

3. Were you admitted to any 4-year colleges out of high school? If so, which ones? If so, why did you attend a community college instead?

II. Influences and Information Sources

4. Who has had a significant influence, either positive or negative, on your educational aspirations? (probe for family, peers, teachers, etc.). In your response, please do not provide any names of other individuals, or describe others in such a way that it would be possible to identify them.
    a. How did your family and/or friends influence your journey toward a bachelor's degree?

5. In what ways did your community college and other schools you've attended prior to coming here influenced your educational aspirations?

6. How did community college faculty/instructors, counselors, or other people who work in your community college influenced your preparation/exploration to transfer a 4-year institution?
    a. Did your CC encourage students to transfer?

7. Where did you get the majority of your information about transferring to a 4-year university from?

8. Are there resources or individuals in the broader community that have helped you with your decision to pursue a bachelor's degree? (probe; role of church; non-profit agencies; community leaders; mentors)?

III. Barriers to Transfer

9. Have you ever been encouraged or discouraged by others to pursue or not pursue a college education because of your racial/ethnic background?
    a. How has this impacted you?

10. What are some of the difficulties you have encountered as a first generation college student on your path to transferring to a 4-year institution? How have you overcome these challenges?

11. How, if at all, have you utilized the navigational skills you used to transfer in your experience as a student UC Berkeley. Do you feel these skills have contributed to your success at Berkeley?

12. Knowing what you know now, if you were to begin this process all over, are there things you would do differently (i.e. searching for information, etc.), things that you would want to know more about?

Appendix C: Informed Consent Forms

University of San Francisco
Consent to Participate in Research (Online Survey)

Resilience and resistance: How Community Cultural Wealth and social capital support the successful transfer of first generation college students to a four-year institution

Introduction and Purpose
My name is Christina Teller. I am a doctoral student at the University of San Francisco in the School of Education. I would like to invite you to take part in my research study, which concerns the transfer preparation process for first generation community college transfer students and the resources and support that students accessed to help them successfully transfer to a four-year university.

Procedures
If you agree to participate in my research, I will ask you to complete the following online survey. The survey will involve questions about your preparation for transferring from a community college to a four-year institution. Questions will focus on what resources you accessed for information and which resources provided motivation or encouragement during your transfer preparation process. The survey should take about *10 minutes* to complete.

If you are interested in participating in a follow-up interview, please indicate this in the survey.

Potential Benefits to Subject and/or Society
As you complete the survey, you may have the opportunity to reflect on your experiences in community college, which may enhance self-understanding. Your responses will also help me understand the transfer-preparation process. Findings may have implications for improving transfer preparation support and for increasing opportunities to prepare first generation college students.

Risks/Discomforts
There could be survey items that you are uncomfortable answering or to which you simply prefer not to respond. Your participation is strictly voluntary, and you may choose to not answer any specific question that you do not want to answer and exit the survey at any time.

Confidentiality
Your study data will be handled as confidentially as possible. No personal identifiers are given or obtainable by the researcher through the survey.

Compensation
In completing the survey, you can opt to enter a drawing for a $100 Target gift card.

Rights
Participation in research is completely voluntary. You are free to decline to take part in the project. You can decline to answer any questions and are free to stop taking part in the project at any time. Whether or not you choose to participate, to answer any particular question, or continue participating in the project, there will be no penalty to you or loss of benefits to which you are otherwise entitled.

Questions
If you have any questions about this research, please feel free to contact me. I can be reached at 415-233-2990 or cteller@usfca.edu.

If you have any questions about your rights or treatment as a research participant in this study, please contact the University of San Francisco, 2130 Fulton Street, San Francisco, CA 94117 or IRBPHS@usfca.edu or 415-422-609.

If you agree to take part in the research, please print a copy of this page to keep for future reference, then click on the "Accept" button below.

University of San Francisco

Consent to Participate in Research (Interview with audio taping)

Resilience and resistance: How Community Cultural Wealth and social capital support the successful transfer of first generation college students to a four-year institution

Introduction and Purpose
My name is Christina Teller. I am a doctoral student at the University of San Francisco in the School of Education. I would like to invite you to take part in my research study, which concerns the transfer preparation process for first generation community college transfer students and the resources and support that students accessed to help them successfully transfer to a four-year university.

Procedures
If you agree to participate in my research, I will conduct an interview with you at a time and location of your choice. The questions will focus on your preparation for transferring from a community college to a four-year institution. The interview should take about 60 minutes to complete.

With your permission, I will audiotape and take notes during the interview. The recording is to accurately record the information you provide and will be used for transcription purposes only. If you agree to being audio taped but feel uncomfortable at

any time during the interview, I can turn off the recorder at your request. Or if you don't wish to continue, you can stop the interview at any time.

I expect to conduct only one interview; however, follow-ups may be needed for added clarification. If so, I will contact you by email to request this.

Benefits
As you complete the interview, you may have the opportunity to reflect on your experiences in community college, which may enhance self-understanding. Your responses will also help me understand the transfer-preparation process. Findings may have implications for improving transfer preparation support and for increasing opportunities to prepare first generation college students.

Risks/Discomforts
There could be questions that you are uncomfortable answering or to which you simply prefer not to respond. Your participation is strictly voluntary, and you may choose to not answer any specific question that you do not want to answer and still continue the interview.

Confidentiality
Your study data will be handled as confidentially as possible. If results of this study are published or presented, individual names and other personally identifiable information will not be used. Your responses will be used for research purposes only and will be strictly confidential and will be disclosed only with your permission or as required by law.

When the research is completed, I may save the tapes and notes for use in future research done by others or myself. I will retain these records for up to 3 years after the study is over. The same measures described above will be taken to protect confidentiality of this study data.

Compensation
In completing this interview, you will receive $20 to compensate you for your time.

Rights
Participation in research is completely voluntary. You are free to decline to take part in the project. You can decline to answer any questions and are free to stop taking part in the project at any time. Whether or not you choose to participate in the research and whether or not you choose to answer a question or continue participating in the project, there will be no penalty to you or loss of benefits to which you are otherwise entitled.

Questions
If you have any questions about this research, please feel free to contact me. I can be reached at 415-233-2990 or cteller@usfca.edu.

If you have any questions about your rights or treatment as a research participant in this study, please contact the University of San Francisco at IRBPHS@usfca.edu.

****

CONSENT

You will be given a copy of this consent form to keep for your own records.

If you wish to participate in this study, please sign and date below.

_____

Participant's Name *(please print)*

_____ _____

Participant's Signature Date

Appendix D: USF IRB Protocol Exemption Approval

From: **Christy Lusareta** <noreply@axiommentor.com>
Date: Mon, Aug 3, 2015 at 8:13 AM
Subject: Exemption Notification - IRB ID: 515
To: cteller@usfca.edu

Protocol Exemption Notification

To: Christina Teller
From: Terence Patterson, IRB Chair
Subject: Protocol #515
Date: 08/03/2015

The Institutional Review Board for the Protection of Human Subjects (IRBPHS) at the University of San Francisco (USF) has reviewed your request for human subjects approval regarding your study.

Your project (IRB Protocol #**515**) with the title **Resilience and resistance: How Community Cultural Wealth and social capital support the successful transfer of first generation college students to a four-year institution** has been approved by the University of San Francisco IRBPHS as **Exempt** according to 45CFR46.101(b). Your application for exemption has been verified because your project involves minimal risk to subjects as reviewed by the IRB on 08/03/2015.

Please note that changes to your protocol may affect its exempt status. Please submit a modification application within ten working days, indicating any changes to your research. Please include the Protocol number assigned to your application in your correspondence.

On behalf of the IRBPHS committee, I wish you much success in your endeavors.

Sincerely,

Terence Patterson, EdD, ABPP
Professor & Chair, Institutional Review Board for the Protection of Human Subjects
University of San Francisco
irbphs@usfca.edu
https://www.axiommentor.com/pages/home.cfm

Appendix E: UC Berkeley IRB Approval

From: <emily.harden@berkeley.edu>
Date: Mon, Nov 9, 2015 at 2:07 PM

Subject: CPHS/OPHS Notice of Approval - Protocol ID: 2015-10-8031(Derek VAN RHEENEN), SPO No. (if any): , Title: Resilience and resistance: How first generation college students leverage community cultural wealth and social capital to successfully transfer from a community college to a selective four-year institution

To: cpteller@berkeley.edu, dvr@berkeley.edu

CPHS/OPHS has approved the following research:

Protocol ID: 2015-10-8031
Principal Investigator or Faculty Sponsor:Derek VAN RHEENEN
Department: Athletic Study Center
Protocol Title: Resilience and resistance: How first generation college students leverage community cultural wealth and social capital to successfully transfer from a community college to a selective four-year institution
Approval Date: November 09, 2015
SPO Number (if any):

The approval letter for this study is attached to this email.

To obtain a copy of the approval letter through eProtocol, please follow the instructions below:
http://cphs.berkeley.edu/eprotocolguide/investigator/history.pdf

If you have any questions, please contact Emily R Harden at emily.harden@berkeley.edu.

--
Christina Teller
College Adviser
Office of Undergraduate Advising | College of Letters & Science
206 Evans Hall | Berkeley, CA 94720-2924
cpteller@berkeley.edu

UNIVERSITY OF CALIFORNIA AT BERKELEY

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COMMITTEE FOR PROTECTION OF HUMAN SUBJECTS
OFFICE FOR THE PROTECTION OF HUMAN SUBJECTS
University of California, Berkeley
2150 Shattuck Avenue, Suite 313
Berkeley, CA 94704 -5940

(510) 642-7461
Fax: (510) 643-6272
Website: http://cphs.berkeley.edu
FWA#00006252

NOTICE OF APPROVAL FOR HUMAN RESEARCH

DATE:	*November 09, 2015*
TO:	*Derek VAN RHEENEN, Athletic Study Center* *Christina Teller, L & S Undg Adv*
CPHS PROTOCOL NUMBER:	*2015-10-8031*
CPHS PROTOCOL TITLE:	*Resilience and resistance: How first-generation college students leverage community cultural wealth and social capital to successfully transfer from a community college to a selective four-year institution*
FUNDING SOURCE(S):	*NONE*

A(n) ***new*** application was submitted for the above-referenced protocol. Your submission has been reviewed by the Office for Protection of Human Subjects (OPHS) and granted exemption, as it satisfies the Committee's requirements under category *2* of the federal regulations.

Effective Date: *November 09, 2015*

Amendments/Modifications: Any change in the design, conduct, or key personnel of this research must be approved by the OPHS ***prior*** to implementation. For more information, see Amend/Modify an Approved Protocol.

Please note that although your research has been deemed exempt from full committee and subcommittee review, you still have a responsibility to protect your subjects, and the research should be conducted in accordance with the principles of the Belmont Report. Download the Belmont Report at this link: www.hhs.gov/ohrp/humansubjects/guidance/belmont.html.

This approval is issued under University of California, Berkeley Federalwide Assurance #00006252.

If you have any questions about this matter, please contact the OPHS staff at 642-7461 or email ophs@berkeley.edu .

Sincerely,

Rebecca ARMSTRONG
Committee for Protection of Human Subjects

Appendix F: Survey and Interview Questions Relationship to Research Questions

Student Survey Questions

Question #	**What measuring (Theoretical framework)**	**Research Question**	**Analysis**
1-3	Social capital; Establish baseline for whether students had access to certain resources and whether used resources	RQ2	#1-2: descriptive statistics #3: qualitative analysis for patterns of other resources accessed
4-5	Social capital; what resources used for info; what resources used for motivation or encouragement	RQ2, RQ3	descriptive statistics
6	Community cultural wealth: measuring aspirational, social, familial capital in home, community and school	RQ3, RQ4	descriptive statistics
7-20	Community cultural wealth: measuring navigational, social, linguistic and resistant capital	RQ3, RQ4	descriptive statistics
21	General information	TBD	Qualitative information analyzed for themes
22-42	Demographics	N/A	#37-38 Establishes first generation status #22-42 frequencies reported

Student Interview Questions

	Theoretical framework	**Research question**
I. Formation of educational aspirations	**Social capital and Community cultural wealth**	
1. When did you come to the realization that you wanted to go to college?	*Aspirational and social capital*	RQ1
2. Do you think others have always expected you to go or not to go to college? (probe for family, teachers, counselors, peers). In your response, please do not provide any names of other individuals, or describe others in such a way that it would be possible to identify them. (a) How has this impacted your motivation for pursuing a Bachelor's degree?	*Aspirational, resistant, familial, and social capital*	RQ1 RQ4
3. Were you admitted to any 4-year colleges out of high school? If so, which ones? If so, why did you attend a community college instead?	*Social, familial and navigational capital*	RQ1 RQ4
II. Resources for information about transfer	**Social capital and Community cultural wealth**	
4. Who has had a significant influence, either positive or negative, on your educational aspirations? (probe for family, peers, teachers, etc.). In your response, please do not provide any names of other individuals, or describe others in such a way that it would be possible to identify them. (a) How did your family and/or friends influence your journey toward a bachelor's degree?	*Aspirational, navigational, social resistant and familial capital*	RQ2 RQ3

5. In what ways did your community college and other schools you've attended prior to coming here influenced your educational aspirations?	*Navigational, social and resistant capital*	RQ1 RQ2 RQ3 RQ4
6. How did community college faculty/instructors, counselors, or other people who work in your community college influenced your preparation/exploration to transfer a 4-year institution? (a) Did your CC encourage students to transfer?	*Navigational, social and resistant capital*	RQ1 RQ2 RQ3 RQ4
7. Where did you get the majority of your information about transferring to a 4-year university from?	*Social capital*	RQ2 RQ3
8. Are there resources or individuals in the broader community that have helped you with your decision to pursue a bachelor's degree? (probe; role of church; non-profit agencies; community leaders; mentors)?	*Social, familial and resistant capital*	RQ2 RQ3
III. Barriers to Transfer	**Social capital and Community cultural wealth**	
9. Have you ever been encouraged or discouraged by others to pursue or not pursue a college education because of your racial/ethnic background? (a) How has this impacted you?	*Resistant and social capital*	RQ4
10. What are some of the difficulties you have encountered as a first generation college student on your path to transferring to a 4-year institution? How have you	*Resistant, navigational and familial capital*	RQ4

overcome these challenges?		
11. How, if at all, have you utilized the navigational skills you used to transfer in your experience as a student UC Berkeley. Do you feel these skills have contributed to your success at Berkeley?	*Navigational and social capital*	RQ4
12. Knowing what you know now, if you were to begin this process all over, are there things you would do differently (i.e. searching for information, etc.), things that you would want to know more about?		RQ1 RQ2 RQ3 RQ4

Appendix G: Call for Participation Language for Emails and Fliers

Language for flier:

TRANSFER STUDENTS
NEEDED FOR
SHORT SURVEY!

Did you transfer to UC Berkeley from a California community college?

Are you a first generation college student?

Do you want to contribute to a more holistic understanding of the experience, strengths, and lived realities of students who transfer from a community college to UC Berkeley?

If so, your experiences and opinions will be very helpful to this study!

Participants who complete the brief survey may be entered in a drawing for a
$100 Target gift card.

To access the survey, visit:

bit.ly/ucbtransfersurvey

Language for email:

Dear [DEPARTMENT REPRESENTATIVE],

My name is Christina Teller, and I'm a doctoral student in Organization & Leadership at the University of San Francisco. I am also a College Adviser in Letters & Science at UC Berkeley.

For my dissertation I am studying the experience of transferring from a California community college to UC Berkeley. **I am writing to ask if you are willing to share my survey with your students using the attached template email and facebook language.**

The purpose of my study is to shift how achievement and access is understood in both the educational space where we work with students as well as in the research literature. In utilizing a framework guided by Critical Race Theory, my goal is to gather a more holistic picture of the experience, strengths, assets, lived realities of students of color. I want to change the way we look at, ask questions about, study, and understand "success"

in higher education, in contrast to the way traditional methodology reinforces an achievement gap and a deficit framework.

I am particularly interested in the experience of first generation students of color, and my intent is to focus on resilience and the strengths of this student population and to highlight the community-based, school-based and individual resources that support the navigation of the transfer process for these students.

Would you be willing to share the link to my survey with your students, colleagues, and anyone who might be interested in participating? Survey link: bit.ly/ucbtransfersurvey

I'd be very grateful for any assistance you can provide, so please feel free to forward this e-mail along. Below and attached is text that you can forward to students or post to a Facebook page.

The survey will be open for approximately four weeks and the criteria to participate are:

1) Transferred to UC Berkeley from a California community college,

2) First generation college student. For purposes of this study, a first generation college student is from a family where neither parent has higher than a high school diploma.

3) U.S. citizen, permanent resident, AB540 or undocumented (i.e. students who do **not** hold a non-immigrant F-1 or J-1 visa).

If you have any questions, please feel free to contact me. Thank you for your time!

Christina